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Suggested by the shortage of personnel in biomedical libraries, this study was conducted to determine which institutions had established formal classroom training programs for library technicians. Information was obtained from 24 institutions through visits, correspondence, study of relevant documents, and interviews with administrators, teachers, students, graduates and employers. Each of the programs is examined separately, including discussion of background, student population, curriculum, reaction to program, libraries employing graduates and program faculty as well as reprints of journal articles describing the programs. It was found that most programs are offered in junior and community colleges and the majority are less than five years old. It is concluded that by standards of increase in enrollment, placement, and statements from employers and employees, these programs do appear to "work." Further research and development activity is recommended generally, while specific recommendations cover recruitment, instruct onal materials, teachertraining, operations research, job market, curriculum and evaluation. The recruitment, employment, and future direction of library technicians are examined separately, and a selected bibliography of 24 items is appended. (JB)

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Vocational Training for Library Technicians

By John Martinsen

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VOCATIONAL TRAINING FOR LIBRARY TECHNICIANS:

A Survey of Experience to Date

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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Institute for Advancement
of Medical Communication

COMMUNICATION SERVICE CORPORATION
Washington, D.C.

1965

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Vocational Training for Library Technicians:
A Survey of Experience to Date

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FOREWORD

Research which contributes to the solution of biomedical library problems has been a continuing concern of the Institute for Advancement of Medical Communication. The idea for the study reported here was conceived and developed by the author while he was a Research Fellow at the Institute. He was struck by the great disparity between the number of biomedical libraries in this country and the current supply of professional level personnel to man these libraries.

Without a new approach to the problem of library manpower, prospects for closing this large and growing gap are dismal indeed. Educating and training a professional level biomedical librarian takes years, and the abilities and aptitudes required of students sharply limit the number of potential candidates for such training. Even if, by some magic, training facilities could be expanded many-fold overnight, the output of librarians would be "too little and too late." Although this output must be increased as rapidly as possible without sacrificing quality, something more is needed.

One hope is that the routine and repetitive tasks librarians now perform can be turned over to machines, thereby enabling them to concentrate on activities that demand professional knowledge and experience. Some day, perhaps, one highly trained librarian managing automated systems of marvelous speed and capacity may be able, singlehandedly, to serve thousands of users. Until then, however, another means of stretching our resources of librarian manpower can be employed — one that has proved very effective for multiplying the effectiveness of other professionals, namely, giving them subprofessional assistants who can be trained rapidly and in relatively large numbers. The present study is based on the premise that this stratagem, when combined with expansion of facilities for training librarians and exploitation of modern technology, promises much toward alleviating the problems of biomedical libraries.

Richard Orr, M. D.
Director, Institute for
Advancement of Medical
Communication

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. . . In terms of technical education and the interests of technical people I think that it is perfectly clear that the kinds of technical people who translate knowledge of science into practical use must be more concerned with information than with matter and energy. They will be involved directly with designing information handling systems and control systems; and they will be working on programs for document retrieval, information dissemination and display. But in all these instances the thing that is being handled is information. And the thing that is being optimized is how to use information for various practical purposes.

—Dr. J. Herbert Hollomon, Assistant Secretary for Science and Technology, Department of Commerce

INTRODUCTION

Motivation for the research described in the following pages derives from a concern about medical communication. It is assumed that the flow of information to biomedical researchers, health professionals, and the general public could be facilitated by strengthening medical library services. If this problem is viewed in the perspective of society's general need for better information services, finding ways to provide medical librarians with subprofessional support appears to be a special case of a widespread problem. For this reason the scope of the study was broadened to include the training of library subprofessionals generally.

In a discussion of this question with a staff member of the Office of Manpower, Automation and Training at the U.S. Department of Labor, a relevant observation was made. In June 1964 there were approximately 2,800,000 eighteen year olds in the United States. A year later the number was close to 3,800,000. This sort of statistic suggests a basic question which this report only begins to touch upon, i.e., can the human resources provided by the "population explosion" be effectively utilized to deal with the problems presented by the "information explosion"? If so, what are the cost/benefit ratios of the different ways of accomplishing this? In August 1964 a general discussion of these questions and the problems of technical education for library personnel was begun at the U.S. Office of Education. In December a formal proposal was submitted to the Division of Vocational and Technical Education; the request was granted, and the survey was conducted between April and September 1965.

For the purposes of this study, the following definition was adopted: Librarians manage collisions between people and ideas in organizations which store information. From this it follows that the professional qualifications of a librarian include: wide-ranging intellectual interests (ideas); responsiveness and sensitivity to individual needs (people); and the ability to arrange collections of recorded ideas and guide people toward them (management). In all three of these task areas professional librarians can probably be assisted by various kinds of subprofessional personnel possessing different skills and experience. But what skills and experience should be matched against which problems or tasks in a library environment? To answer such a question, more would have to be done in the way of time-motion studies and operational research in libraries than has been the case in the past, but such an analysis was not the purpose of this study. Here the imme-

diate goal has been simply to find out what institutions have established formal classroom training programs for library technicians (in contrast to on-the-job or apprentice-type training). The primary focus of the inquiry did not encompass in-service training of library employees or undergraduate programs leading to the baccalaureate degree.

While a working definition of a librarian has been attempted, no such definition of the technician or technical assistant is offered. This is unquestionably an issue which must be resolved if progress is to be made; however, a precise definition of a library technician's role will require considerably more research than this introductory survey can provide. For the present only an operational definition can be offered: A library technician is a graduate of the programs described in this report. The programs included are those that offer post-high school training not intended for the baccalaureate degree candidate. As in virtually all new problem areas, there is only limited agreement on terminology. Quite arbitrarily, but for the sake of consistency, the term "library technician" will generally be used throughout this report.

Acknowledgements. Four months of full-time effort were devoted to the execution of this study. Financial support of this activity came from the U.S. Office of Education; however, more than a year of thought and exploration preceded the submission of the research proposal. During my tenure as a Research Fellow at the Institute for Advancement of Medical Communication (IAMC), I was encouraged to develop and test this and other ideas. For providing this opportunity, I am greatly indebted to the IAMC and to the National Heart Institute, which supports the IAMC's unique program for Research Fellows in biomedical communication. (U.S.P.H.S. Grant HE-5414.)

Personal thanks are due to my colleagues at the IAMC for their stimulation, criticism, and support. It is necessary to acknowledge a special debt to the Institute's librarian, Mrs. Mildred Heatwole, for outstanding information services.

The production of this report would not have been possible without the editorial collaboration of Mrs. Mary Eldridge. Camera-ready copy was prepared for us by Mrs. Nita Wadeson. From them the material passed into the hands of a most forbearing, cooperative and helpful printer, Mr. Robert Beard.

Finally, it must be pointed out that a survey such as this is really a collaborative effort in which the investigator is quite dependent upon the cooperation he receives from literally dozens of informants and respondents. There could be no study of library technician training were it not for years of dedicated effort administrators, teachers, and librarians around the country have devoted to such programs. There could be no report on these programs were it not for the willingness of these same individuals to share freely their knowledge and experience. This report is for them. In an important sense, though, it is from them. In any case, many thanks must be given to them.

CHAPTER I

SUMMARY OF MAJOR FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Information was received from 24 institutions currently offering library instruction at the clerical or technical level. Programs at three other schools which formerly offered such courses were also studied, and correspondence was received from two junior colleges planning to start their programs in the fall of 1965. There are probably a number of schools in one stage or another of initiating programs, but this cannot be readily determined until the next Survey of Organized Occupational Curriculums by the U.S. Office of Education.

Schools with library courses which were visited during this study include:

City College of San Francisco	San Francisco, California
College of the Siskiyous	Weed, California
Fullerton Junior College	Fullerton, California
Gavilan College	Hollister, California
Los Angeles Trade-Technical College	Los Angeles, California
Mt. San Antonio College	Walnut, California
Pasadena City College	Pasadena, California
Rio Hondo Junior College	Santa Fe Springs, California
Ferris State College	Big Rapids, Michigan
Lansing Community College	Lansing, Michigan
Salem County Technical Institute	Penns Grove, New Jersey
Ballard School of the YWCA	New York City, N. Y.
University of Toledo	Toledo, Ohio
Brigham Young University	Provo, Utah
U.S. Dept. Of Agriculture Graduate School	Washington, D. C.

Visits also were made to Diablo Valley College in Concord, California and Erie County Technical Institute in Buffalo, New York, which formerly offered library training.

Correspondence and telephone interviews produced information on existing programs at the following schools:

Citrus Junior College	Azusa, California
Porterville College	Porterville, California
Palomar College	San Marcos, California
Santa Ana College	Santa Ana, California
Santa Barbara City College	Santa Barbara, California
Lamar Junior College	Lamar, Colorado
Central YMCA Community College	Chicago, Illinois
Treasure Valley Community College	Ontario, Oregon
Puerto Rico Junior College	Rio Piedras, Puerto Rico

Correspondence was also received from Miami-Dade Junior College in Miami, Florida and Catonsville Community College in Catonsville, Maryland where programs will begin in the fall of 1965. Information was received about the program formerly conducted at Orange County Community College in Middletown, N. Y. Training offered by chapters of the Special Library Association and the American Hospital Association was also studied.

The population sampled, though not a completely exhaustive list of schools offering library courses can be described as comprehensive rather than representative. It is highly unlikely that any programs which have graduated more than 20 students in the past 3 years are not on the list. Most of the programs have existed less than 5 years, and they have all developed on a pragmatic basis in response to perceived needs in their immediate surroundings. As a result, they do not have a great deal in common and only limited generalizations can be made about the group as a whole. They are isolated from each other which inhibits the growth of common methods to attack similar problems.

Twenty-four institutions were identified in this survey, yet it was unusual to find an administrator or teacher acquainted with as many as 4 or 5 other programs. The most widely known program appears to be one which went out of existence--Orange County Community College (discussed in detail later). Often the older, well established and more successful programs such as those at Ballard School of the YWCA, Ferris State College, Mt. San Antonio College, Citrus College, or the USDA Graduate School, are entirely unknown to people planning or administering training programs.

The major findings set forth below represent a synthesis of general impressions more than a set of inferences drawn from groups of comparable data. In the case histories of programs, which constitute the main body of this report, the basis of the major findings is more fully documented.

MAJOR FINDINGS

1. The Number of Programs.

One of the most surprising discoveries made in this survey was the number of institutions actually offering library courses at the subprofessional level. In none of the discussions which preceded the survey, nor in the course of the interviews, was there a suggestion from anyone that this number of schools should be studied. The author knew of 8 at the time of submitting the proposal and estimated that the total might be as high as 15.

2. The Effectiveness of the Programs.

No effort was made in this study to evaluate existing programs. This is an area of uncertainty which must be resolved by future research. Here it can only be reported that, by the commonly accepted standards of growth in enrollment, placement of graduates, personal statements of satisfaction by employees and employers, and interest in the programs on the part of administrators and advisory groups, the existing programs do appear to "work." None of the programs visited appeared likely to be discontinued in the near future, most of them have a growing enrollment, and in a few instances enrollment pressure is straining the capacity of the physical facilities presently available.

3. The Student Population.

The largest identifiable group of students is a group of women beyond normal college age who are working, or wish to work, in a library environment. Frequently they have raised their families and anticipate returning to the labor force. In many cases their education is being resumed after a lapse of 15 or more years. In some cases these women are already employed in libraries and are enrolled to become eligible for upgrading. While middle-aged women form the largest single group of students, a sizeable number of recent high school graduates is also enrolled. This group, which is probably growing, is also predominantly female.

4. Recruitment.

Several schools produce for prospective students a pamphlet describing the program and future employment possibilities in quite general terms. In some cases a mimeographed sheet of questions and answers helpful to guidance counselors is distributed, but adequately supported and systematic recruitment efforts were not observed during this study. In most cases it appears that the students discover the program by finding it in the school catalog. "Recruitment," then, is largely a process of placing informative announcements where students who are already favorably disposed toward library work are likely to respond.

The favorable disposition toward libraries appears to develop largely for two reasons. The older group of students often have considerable experience as users of libraries. During interviews several students mentioned that the library experience of their children was an important factor in their own decision to seek library training. Among the younger students other influences appear to operate decisively. Interviews with recent high school graduates produced such statements as: "I worked in the library in high school," or "My high school librarian was a wonderful person," or "I didn't know what I wanted to major in when I came to the college, but I was in the Library Club in high school so I thought I might like the library assistant program." When asked what it is about library work that makes it attractive, the same group of students frequently answer, "Well, I want a job where I can work with people."

A relatively small, but significant, group of women seek library technician training because of their present or previous employment in commercial or industrial establish-

ments. They are frequently experienced secretaries in rapidly growing companies which need library services. If the manager of such a concern is unable to justify a full-scale library operation on the premises, he is likely to appoint an experienced secretary as the office "librarian." In the New York City area a high percentage of the students taking library clerical courses at Ballard School of the YWCA have this type of background. Analogously, many of the students in the library workshops offered by the American Hospital Association are employed in hospital libraries following employment in other departments of a hospital.

5. Types of Libraries Employing Technicians.

The graduates of library technician programs are employed for the most part in public and school libraries. Most of the curricula are designed with the needs of these employers in mind. However, the high proportion of relatively new programs, with few if any graduates as yet, makes it difficult to assemble meaningful statistics. Graduates of the program for aides in technical libraries at Salem County Technical Institute in Penns Grove, New Jersey have been employed by the DuPont Company library. Several years ago a program at Erie County Technical Institute in Buffalo, New York, trained technicians for chemical libraries. Graduates were successfully employed in a number of scientific establishments in the Buffalo area.

The employment of library technicians in government installations in the capital area has created special needs. These needs are met largely by the program in library techniques offered at the Graduate School of the U.S. Department of Agriculture. The name of this institution is somewhat misleading here as the library program actually requires only a high school diploma for entrance.

6. Instructional Materials.

The lack of suitable texts and other materials was noted in many, if not most, of the schools contacted. Since the training of library technicians represents a new level of instruction or a new institutional setting for this instruction, it is not surprising to find instructors developing their own materials. To some extent supplementary reading lists are compiled from texts the instructors themselves used in graduate school. This is rarely satisfactory. Special materials designed for use by library technicians (workbooks, programed texts, audio-visual aids, etc.) are virtually non existent.

7. The Instructional Staff.

The instructors encountered in this survey were, without exception, trained professional librarians who often had some special graduate training or teaching experience. Some had begun their careers as school librarians or had been high school teachers before entering library school. None, however, at the time of their own professional training had anticipated or made special preparation for their present role as instructors of library technicians.

Instructors are usually members of the school's library staff, employed originally as such, who then sought or accepted the new role on the teaching staff. In the overwhelming majority of cases the instructors continue to fulfill administrative duties in the library. At only two of the schools visited were librarians employed specifically as teachers. Consequently, instructors frequently complain that they do not have enough time to develop new materials, prepare for their classes, and staff the library.

8. The Job Market.

While all of the existing programs have developed in response to immediately perceived needs in their respective localities, there has been little systematic analysis of the likely future demand for library technicians. Before initiating the new program, the college staff commonly asks surrounding libraries or school districts. "If we start this program will you hire our graduates?" If there is enough positive response, the school catalog soon contains a description of the new program.

When a survey is taken to determine employer needs, there is usually a strong presumption that the potential employer understands what a library technician is likely to be able to contribute to his organization. Since most of the potential employers are assumed to be libraries, this is a reasonable presumption. However, it appears that to date no educational institution has engaged in job development activity designed to help employers understand their unrecognized need for employees with library technician training.

CONCLUSIONS AND INTERPRETATIONS

1. The surprisingly large number of programs discovered suggests the possibility that such programs are proliferating rapidly. Better information is likely to be available in the future now that the term "Library Technician" appears on the form used in the Office of Education's annual Survey of Organized Occupational Curriculums. Given the ubiquitous nature of library manpower problems, along with the pragmatic and spontaneous quality of the response of community colleges to local situations, there would appear to be no insurmountable obstacle to the development of library technician programs in many of the nation's 719 junior colleges.*

2. The predominantly female character of the student body will probably continue in those programs designed to meet local needs for personnel in school and public libraries. To attract more men into the field it will be necessary to establish more programs designed to meet the special needs of scientific, technical, or business libraries. There appears to be no reason why this should not or could not be accomplished.

* This figure appears in the 1965 Junior College Directory published by the American Association of Junior Colleges. It represents a net increase of 41 over the number of schools listed in the 1964 edition.

3. The students' choice of library technician training because they "want to work with people" indicates a possible change in the older public image of a librarian as a "guardian of the books."

4. Perception of needs in a given area and the willingness of community colleges to make the appropriate responses, will be decisive in the growth of library technician programs. The chief limiting factor in the growth rate of these programs, however, is likely to be the availability of trained librarians with aptitude and ability to become teachers.

5. The pragmatic growth of library technician programs in response to local situations has produced curricula admirably suited to the more evident needs of particular areas. Once a program is established, however, this approach does little to preserve the kind of flexibility required to respond to emerging and less evident needs. In the absence of a continuing supply of innovative concepts, the earlier program concepts tend to become fixed and difficult to change.

6. It will not be possible to estimate the real future needs for library technicians until much more research is done analyzing all organizations which process and store quantities of information. Correspondingly, without greater knowledge about the probable future demand for library technicians, it will be difficult to decide what curricular innovations are appropriate. For example, the history of the library clerical program at Ballard School of the YWCA in New York City indicates that businesses are probably one of the largest (but least explored) areas of potential employment for library technicians.

OUTLINE OF RECOMMENDATIONS

Further research and development activity appears to be needed in a number of areas. Specific recommendations are outlined below. In pursuing any one of these problem areas, however, it would seem wise to view particular actions in the broad context of the growth of all the information technologies. At the present time there is a substan-

tial (and apparently growing) demand for library workers. A comparable situation probably exists in such related fields as electronic data processing, message delivery services, telephone reference and answering services, direct mail and addressing services, reprographic services and in those industries which produce and service the equipment used by workers in all the above categories. The training of library technicians can be viewed as one curricular effort in a wide spectrum of training opportunities for subprofessionals in the information technologies.

Even though a wide-ranging survey of workers in the information field and their educational needs would be helpful, it appears that a number of specific research efforts could be profitably undertaken in the library technician area. These would include the following activities:

1. Recruitment

Increased utilization of existing materials and development of new ones would enable more high school librarians to give more students experience as library assistants or members of library clubs. Beyond the preparation of special materials for high school librarians, other research efforts could determine the best type of supporting services to offer school librarians for recruitment purposes.

2. Instructional Materials

Research and development are needed to provide better instructional materials for library technician courses. The foremost need is for material suitable for use in community colleges; although many clerical tasks could probably be taught at the high school level if the proper materials were available.

3. Teacher Training

As suggested earlier, the supply of professional librarians available for teaching may be the chief limiting factor in the growth of library technician programs. Since none of the librarians now teaching in community colleges anticipated his or her present role during graduate training in Library Science, special materials and methods should be developed to assist librarians who assume teaching responsibilities. To meet future needs, library schools should be assisted in making the curriculum changes necessary to prepare an increasing number of their graduates for teaching careers in community colleges.

4. Operations Research

The optimal matching of a technician's training and experience against specific library tasks (within the financial constraints imposed by reality) cannot be accomplished until the technician's role is adequately defined. To do this the technician's role must be understood in the context of all other library system operations. Therefore, research should be undertaken to provide more precise task analysis of the work of all library personnel. Operational research of this kind needs to be conducted in different types of libraries serving various groups of users.

5. The Job Market

Job market analysis in specific metropolitan areas or larger geographic regions is needed to provide better estimates of the present and future demand for library technicians. The responsibility for such research should logically be shared by a number of funding agencies. The Labor Department has an obvious interest in this area. Determination of the need for library technicians in the medical field could be undertaken by the Public Health Service. The Commerce Department and Small Business Administration should be concerned with the library manpower needs of business and industry. (Full implementation of the recently enacted State Technical Services Act will probably require a marked increase in technical information employees in business and industry.) Manpower in scientific and technical libraries concerns a number of funding agencies. The new Department of Urban Affairs will be dealing with city planning departments, many of

which have understaffed libraries. From all these sources a great deal of useful data could be collected to provide better estimates of the job market.

6. Curriculum Planning

Reliable information, useful to an administrator who is launching a library technician program, is virtually unobtainable at the present time. Systematic research should be undertaken to develop curriculum guidelines and other supporting material. While this cannot be accomplished in any final sense until research on library operations and job market analysis are undertaken (recommendations #4 and #5 above), much of the experience acquired in the development of existing programs could be made more readily available. Meetings and collaborative efforts among experienced teachers and administrators should be arranged for this purpose.

7. Evaluation

The development of curriculum guidelines calls for the concomitant development of methods of evaluation of library technician programs. One step in this direction would be the initiation of longitudinal studies. The real test of any educational program is the personal success its graduates enjoy and the nature of the contribution they make to society. This requires follow-up studies of library technicians over a number of years. A sufficient number of such graduates are now working to justify long term studies of their employment experience.

Other evaluative techniques can probably be developed. As information scientists develop sophisticated techniques for analyzing information systems it will be easier to estimate the cost and contribution of human resources in these systems. Cost analyses of training programs and the operation of information systems could be combined with measures of personnel effectiveness to provide better estimates of the value of library technician programs.

CHAPTER II

METHODS

This inquiry is best described as a reconnaissance mission. The territory to be mapped was largely unknown at the beginning of the study. Therefore, the main objective has been to obtain reliable estimates of the overall dimensions of the problem area. In such an effort a certain amount of fine detail must be sacrificed if the investigator is to achieve a broad perspective. This has been partially compensated for by using a case history approach. Certain of the more established programs are described in some detail, while minimal information is provided on all programs surveyed.

Instructional programs in library subprofessional training are variously described by program directors as training for library clerks, library aides, library assistants, library technical aides, library clerical assistants, library technicians and other combinations of such terms. With the primary goal of identifying all schools that offer such training, the definition of library subprofessional training used for this survey was: Formal classroom instruction for library employment, given at the post-high school level, not intended for baccalaureate degree candidates and not requiring present employment in a library. This definition excludes in-service training or programs of continuing education designed particularly for library employees. It also excludes many undergraduate programs that prepare students for graduate training or employment as certificated school librarians. The absence of consensus on terminology virtually ruled out the use of mailed questionnaires. Accordingly, as many programs as possible were visited or contacted by telephone.

The list of schools with programs that fit the stated definition came from three principal sources. The first source was conversations with leaders in the library field, notably, the Library Services Branch of the U.S. Office of Education. Miss Sara Reed of that office helped provide a number of important leads. The second major source was the U.S. Office of Education's annual Survey of Organized Occupational Curriculums. The most recent survey from which data is presently available is for the 1963-64 academic year. Line 5300-867 on that survey form is for "Library Technician or Aide." This is the first time such a line has appeared on the Survey of Organized Occupational Curriculums, which goes annually to more than 2,000 institutions of higher education.

A third important source of information was a paper prepared in 1963 at the Graduate Library School of Denver University by Mrs. Aline Wisdom, entitled "Evaluation of Undergraduate Library Science Training in California Junior Colleges." Mrs. Wisdom, Librarian at Citrus College in Azusa, California (described later), kindly made a copy of her study available. From these sources the list of institutions in Chapter I of this report was assembled.

Each program is considered as a separate case study. School catalogs, course outlines, and other documents prepared by instructors were one source of information. Another important kind of information came from correspondence and tape-recorded interviews with persons involved in the training programs. To provide structure to these interviews, various questions were prepared for five groups of people: administrators, teachers, students, graduates, and employers. Not all questions were appropriate for every interview; therefore, this list constitutes an outline for interviews rather than a questionnaire schedule. The questions do indicate the kinds of information considered most relevant.

The sets of questions are listed below.

To Administrators:

Could you recount the circumstances prior to the inauguration of your library technician program and describe the factors which influenced the decision to begin offering classes?

What were the principles which guided the planning of your curriculum? Have these objectives been changed in any significant way since?

How was the program received at that time? How since?

Did you anticipate any problems and how did you meet them?

Have there been unanticipated problems and what have you done to meet them?

Where and how did you obtain instructors? What has been their educational and occupational background?

How has the program been received by professional librarians?

What kinds of jobs do your graduates usually take? Do the salary scales seem satisfactory? Are you satisfied with the rate at which they become oriented to their jobs?

What enrollment levels have commonly occurred? Do you consider enrollments less than optimal? Satisfactory? Overloaded?

What changes, if any, are you contemplating for the future?

What general advice would you offer an administrator in a comparable institution who is thinking of starting a library technician program?

To Teachers:

How did you happen to become an instructor in library technology?

Do you have any problems in obtaining texts or other instructional materials?

How do your students compare with students in other programs in terms of ability? Motivation?

Do you balance class experience with work experience? If so, toward what kind of balance do you aim?

Are you satisfied with the support given this program by the administration? Does the administration take a leadership role?

If students at your institution see vocational counselors, what attitudes and knowledge do the counselors have concerning library technician careers?

Are you generally satisfied with the students in your classes? What is your conception of the ideal beginning student?

Have your graduates been placed satisfactorily? Does placement require exceptional efforts of any sort? Of the graduates whose work you know about, would you say that they are reasonably satisfied with their positions? Unhappy? Euphoric?

Can you identify any factors in the students' backgrounds which appear to lead to very high or very low levels of achievement in their classes? In their jobs?

What part of your training and experience has proven most valuable to you in your role as a teacher? Are there any recommendations in particular you would make to someone preparing teachers for work in library technician programs?

Do you have responsibilities for the administration of the institution's library? If not, would you like to? If so, do teaching and service functions complement each other or conflict in your experience?

Have any significant number of students found positions and left school without completing the program?

What are the chief problems you see in developing and operating a library technician training program? What is your estimate of the problems your program is likely to be facing in the next five or ten years?

To Students:

How did you first learn about the library technician program?

What did you think it would be like? Were you right?

Have you urged anyone else to come into the program? Did they?

Compared to your other courses or students you know in other programs, do you feel you're learning what you need to know? What you want to know?

Are you working in a library or information center of some kind now?

Are you acquainted with library technicians who are working now?

What were some of the things that made you decide to enter this program?

Do you expect to find a job right after graduation? What kind of job would you like to start with? What sort of job would you guess you'll have five years after graduation?

What part of your training do you enjoy the most? The least?

To Graduates:

Did you experience any difficulty in finding a position when you left school?

Have you changed jobs since graduation? How many times?

What have been the chief sources of satisfaction in your work? Of Dissatisfaction?

How closely is your work related to the training you received as a library technician? Could you be doing this work without having gone through the program? Could you have gotten the job without having gone through the program?

What is your job title? Does this title mean something like "library technician"? How do you think your co-workers perceive you and this particular position?

Has your work experience been what you had expected when you were in school? If greatly different, has the difference been all to the good or bad from your personal point of view?

How would you evaluate your chances of doing what you want to do in the next five years within this organization (or another one) because of the training you have had?

How long have you been working? Do you plan to take any further training?

To Employers:

Is there a job title something like "library technician" in your organization? If not, have you found that people with library technician training are particularly useful to the organization? In what ways or for what reasons?

Do you recruit employees from schools which train library technicians? If so, how did you learn about such training programs?

How close do you feel the relationship is between the training these people have received and the work your organization demands?

Has hiring library technicians brought on any special problems in terms of personnel organization, salary scale differentiation, or personal relations within an office?

From the employees you have had, what judgment would you make of present library technician programs?

Do you plan to employ persons with library technician training in the future?

Many of the interviews were tape-recorded. Some of these were selected for transcription and are presented in this report for illustrative purposes. Interviews with administrators, instructors, and students were readily arranged during visits to schools. It was considerably more difficult to interview graduates of programs and their employers. A large proportion of the programs studied are too new to have produced many graduates.

A basic presumption is that most people who examine the results of this study will not be familiar with training programs for library technicians even though many of them will have considerable familiarity with library problems. Therefore, this material has been collected and presented to provide an overview of the experience of the relatively few individuals who have any substantive knowledge of the training of library subprofessionals.

It must be added that the information reported here is largely unevaluated data. Part of the motivation for this study was to assist those librarians, instructors, and administrators who may be contemplating the need for subprofessional training programs in their locales. However, because very little evaluative research has been done in this field, existing programs should be used as models for emergent ones with considerable caution. Though library technician training appears to be growing and thriving, many unanswered questions await the attack of future investigators.

CHAPTER III

SELECTED CASE HISTORIES

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A FOUR-YEAR SCHOOL WITH A TWO-YEAR TECHNICIAN PROGRAM:

FERRIS STATE COLLEGE

Big Rapids, Michigan

Program Director - Miss Bernice Headings

Background

Ferris State College in Big Rapids, Michigan, is one of three institutions granting the B.A. degree which also train library technicians at the Associate of Arts degree level. (The programs at Brigham Young University and the University of Toledo are described in a later section.) From the fall of 1959, when 2 students enrolled in the first courses to be offered, the program has grown to accommodate the 38 students enrolled in courses in the fall of 1965. These courses are offered in the Collegiate Technical Division of the State College, which awards an Associate of Applied Science (A.A.S.) degree in such fields as Enviromental Health, Highway Technology, Industrial Chemistry Technology, Optical Technology, Technical Illustration, and several others in addition to the Library Technician program.

To understand why Ferris State College has been one of the pioneers in the development of library technician training, it is helpful to view this program in the wider context of the College itself and its history. To quote from the 1964-65 school catalog:

> Ferris State College was founded in 1884 by Woodbridge Nathan Ferris and was known for a few months as "Big Rapids Industrial School." Thereafter, until 1899 it was known as "The Ferris Industrial School." In 1899 its name was changed to "Ferris Institute." It was privately-owned and operated until 1931 when it became a non-profit, non-stock, educational corporation.
>
> In 1949 Ferris Institute was offered to the State of Michigan as a memorial to its founder who had served the state as Governor and as U.S. Senator. It was established as a state college by the Legislature . . . (in) 1949. In 1963 . . . the name was changed to Ferris State College.
>
> Ferris State College has long been known for the manner in which it has opened the doors of educational opportunity for many serious minded students despite their previous limited educational background and attainments. (p. 49)
>
> . . . Ferris is the state college of Michigan whose primary, though not exclusive, emphasis is in the area of practical, vocational and technical education. (p. 50) . . . Ferris State College was the eighth college in the United States to have terminal collegiate training, offering two-year certificate programs in 1886. (p. 155)

The section of the school catalog introducing the Collegiate Technical Division contains this statement:

> The role of the technician in modern society might be called a "middle occupation" for it is between the role of the skilled worker and that of the professional man, an engineer. The need for the technician has been caused by the demands of a society undergoing a technological revolution . . . .
>
> Not only does the engineer need the technician, but the increased demand for trained personnel in the varied service and medical professions is everywhere evident. The emphasis on specialization and the demand for personnel at varied levels of training in all our major professional fields in our modern technological age have no limits. (p. 155)

It was within the institutional and historical context suggested by these brief quotations that discussions were begun at Ferris in 1955 concerning the advisability of a two-year curriculum in the library field. In May 1956 a Library Aide Committee met and drafted a tentative outline for such a program. In view of the uncertainties in the job market where graduates of such a program might have to compete, the committee felt that it would be wise to place a strong emphasis on secretarial as well as library skills.

Discussion of the proposed curriculum proceeded into

1958 and involved correspondence and conversation with staff members of the Michigan State Library in Lansing. In retrospect, it would appear that the encouragement and support which Ferris received from the Library Consultant Division of the Michigan State Library were important ingredients in the combination of factors that produced the program operating today. The development of any subprofessional program obviously requires desire and ability on the part of educational institutions to supply technicians; but, correspondingly, there must be a willingness on the part of the profession to accept them. In a sense, it was "no accident" that the right combination of factors occurred in Michigan, but to go beyond a descriptive presentation into an analytic treatment of this subject would involve a consideration of the history of the Michigan State Library and its relationship to local libraries.* This is a story in itself, which deserves telling (up to and including the Michigan Library Systems Act of 1965); but it cannot be told here.

During the academic year of 1958-59 the decision was made by the College administration to inaugurate the program. A "Library Aide Advisory Committee" was nominated, and Dr. Lucy Maddox was appointed as the first instructor. At present the advisors are known as the "Library Technician Advisory Committee," and they include public, school, and special librarians, as well as representatives of the Michigan State Library and the Mid-Michigan Library League. Dr. Maddox offered her first courses in the fall of 1959. In retrospect again, it appears that the decision to employ a librarian solely in a teaching role was a crucial one.

The separation of library service functions and library instruction functions was insisted upon by Mrs. Goldie Nott, the Ferris Librarian. Mrs. Nott has participated in the development of the program from the earliest discussions in 1956 to her present supervision of students during their Library Practice courses. The guidance she has given this program, however, included the strong recommendation during 1958-59 that technician training not be a chief administrative responsibility of the Librarian. This continues to be the case.

Fall enrollment in the program has grown in the following pattern:

Academic Year	Students
1959-60	2
1960-61	13
1961-62	21
1962-63	21
1963-64	27
1964-65	32
1965-66	38

*In its proposed standards for the certification of librarians, the Michigan State Library has also recognized the status of library technicians. No comparable recognition by an accrediting agency was encountered elsewhere.

These are gross enrollment figures and therefore include some students who are not taking their A.A.S. degree in the Library Technician program.

The Curriculum

In the fall of 1958, following discussions with faculty members, Michigan State Library personnel, and others, Mrs. Nott drafted a sequence of proposed courses. The course descriptions were as follows:

1. Introduction to Library or Use of the Library. 3 hours

A general course in the use of the library, including general background and philosophy of library service, especially, public libraries. Students to receive instruction and practice in the use of the card catalog, Readers' Guide, encyclopedias, dictionaries and general reference works. Students to receive practice in the shelving of books so that the arrangement of books on the shelves is understood.

2. Reference. 3 hours

Study of general encyclopedias, special reference works, yearbooks, dictionaries, and other basic sources used in reference work. An expanded course going beyond course 1 and including practice in the preparation of simple bibliographies, emphasizing correct form.

3. Book Selection and Order Procedure. 3 hours

Principles of book selection with emphasis on the sources of guidance in book selection, the evaluation, of these sources which include book review, book lists, trade bibliographies, publishers' annotations, etc. The policy and practice of buying books and techniques of ordering and accessioning with an introduction to elementary budget techniques and simple financial records.

4. Classification, Cataloging, Filing. 3 hours

Study of the Dewey Decimal Classification system, with problems and practice in simple classification. The purpose is to give an understanding of the classification numbers, not to make classifiers of the students. Study of the principles of diction-

ary cataloging, using, perhaps, Simple Library Cataloging, by Susan Grey Akers. Practice in dictionary cataloging plus practice in assigning subject headings. Emphasis to be placed on working under direction and on typing catalog cards from prepared copy with work on modifying printed cards. Practice in filing in the various library catalogs - dictionary catalog, authority file and shelf list.

5. Circulation, Maintenance, Preparation of Materials. 3 hours

Mechanical preparation, physical arrangement, circulation and maintenance of books, periodicals, pamphlets and other library materials. Study of various systems of circulating library materials. Study of the acquisition of periodicals and pamphlets, records, picture collections, etc. Study of inventory methods, reasons for inventory, and records to be kept.

6. Practice Work. 10 hours

One hour per day for two terms practice work in the library. Work under close supervision at charging desk, typing catalog cards, simple cataloging, filing, shelving books and magazines, work with vertical file, college catalogs, etc. Working under actual library conditions and putting into practice the theories learned in the preceeding courses.

A comparison of suggestions above with course descriptions appearing in the 1964-65 school catalog (reproduced below) indicates that the main lines of the intended program have been followed. The major change appears to be a slight increase in the amount of time spent in the "practice" courses and the addition of a seminar in Library Problems (L.S.-205) as a final course.

LIBRARY TECHNICIAN

Library Science 101. EFFECTIVE USE OF THE LIBRARY. Three quarter hours.

A general course in the use of the library, including general background and philosophy of library service, especially public libraries. Students receive instruction and practice in the use of the card catalog, Dewey Decimal Classification system and Cutter numbers relative to arrangement of books and shelves, Reader's Guide, encyclopedias, dictionaries, and general reference works. Open to all students. (2+3)

Library Science 102. BOOK SELECTION AND ORDER PROCEDURE. Three quarter hours.

Principles of book selection with emphasis on the sources of guidance in book selection, the evaluation of these sources which include book review, book list, trade bibliographies, publishers' annotations, etc. The policy and practice of buying books and techniques of ordering and accessioning with an introduction to elementary budget techniques and simple financial records. Open to all students. (3+0)

Library Science 103. REFERENCE. Three quarter hours.

Study of general encyclopedias, special reference works, year books, dictionaries, and other basic sources used in reference work. An expanded course, including practice in the preparation of simple bibliographies, emphasizing correct form. Open to all students. (3+0)

Library Science 201. CLASSIFICATION, CATALOGING, FILING. Four quarter hours.

Study of the Dewey Decimal Classification system with problems and practice in simple classification. The purpose is to give an understanding of the classification numbers, not to make classifiers of the students. Study of the principles of dictionary cataloging. Practice in dictionary cataloging plus practice in assigning subject headings. Typing catalog cards from prepared copy with work on modifying printed cards. Study of principles of library filing with problems and practice in filing. (3+2)

Library Science 202. CIRCULATION, MAINTENANCE, PREPARATION OF MATERIALS. Three quarter hours.

Mechanical preparation, physical arrangement, circulation and maintenance of books, periodicals, pamphlets and other library materials. Study of various systems of circulating library materials. Study of the acquisition of periodicals and pamphlets, records, picture collections, etc. Study of inventory methods, reasons for inventory, and records to be kept. (3+0)

Library Science 203. PRACTICE WORK. Two quarter hours.

Six hours per week of library practice working under actual library conditions and practicing the theories learned in the preceding courses. (0+6)

Library Science 204. PRACTICE WORK. Two quarter hours.

Continuation of Library Science 203. Six hours per week of practice work in libraries. (0+6)

Library Science 205. LIBRARY PROBLEMS. Two quarter hours.

Seminar type course designed to integrate the technical course work of the preceding quarters. Special problems are assigned for investigation and reporting. Group discussion of common problems. (2+0)

Library Science courses at Ferris State College occupy slightly more than 20 per cent of the total requirements for the Associate of Applied Sciences degree. The overall curriculum is as follows:

L I B R A R Y T E C H N I C I A N

FIRST QUARTER

	Hours
L.S. 101- Effective Use of the Library	3
C.S. 101- Communication Skills I	3
S.T. 120 or S.T. 121. Elementary Typewriting	3
Soc. Sci. 101- Man and Society I	3
Health and Physical Education 121	1
Continuing Orientation	1
Elective	3
	17

SECOND QUARTER

L.S. 102- Book Selection and Order Procedure	3
C.S. 102- Communication Skills II	3
S.T. 123- Intermediate Typewriting	3
Soc. Sci. 102-Man and Society II	3
Health and Physical Education 122	1
Humanities 101-Personal & Cultural Appreciation I	3
	16

THIRD QUARTER

L.S. 103- Reference	3
C.S. 103- Communication Skills III	3
S.T. 245- Business Filing	2
Hum. 102- Personal and Cultural Appreciation II	3
Pol. Sci. 121-Principles of American Government I	3
Health and Physical Education 123	1
Elective	3
	18

FOURTH QUARTER

	Hours
L.S. 201- Classifying, Cataloging, Filing	4
Pol. Sci. 122- Principles of American Government II	3
Com. 121-Business Arithmetic	4
Literature Elective	4
History Elective	3
	18

FIFTH QUARTER

L.S. 202-Circulation, Maintenance, Preparation of Materials	3
L.S. 203-Practice Work	2
Bio. Sci. 101- The Living World I or	4
Phy. Sci. 101-The Physical World I	
Psych. 221-Introductory General Psychology	3
Speech Elective or	4) One
Education 400-Use and Development of Teaching Aids	3) Only
	15 or 16

SIXTH QUARTER

L.S. 204-Practice Work	2
L.S. 205-Library Problems	2
Bio. Sci. 102-The Living World II or	
Phy. Sci. 102-The Physical World II	4
Literature Elective	4
History Elective	3
Elective	3
	18

Total Number of Credit Hours Listed, 102 or 103
Total Number of Credit Hours Required, 96

From the above list it can be seen that the Ferris program still places a relatively heavy emphasis on secretarial skills, with three typing courses and a course in voice transcription. There may be some change in this emphasis, however, in the near future. According to Miss Bernice Headings (who succeeded Dr. Maddox as Director-Instructor of the program in 1962), recommendations have been submitted to the committee of Deans that the courses in Applied Typing and Voice Transcription be dropped from the list of requirements. Electives in Speech or Audio-visuals would replace them.

The Courses

The following excerpts have been taken from the course outlines prepared by Miss Bernice Headings for the 1964-65 academic year. Space limitations prevent exhaustive descriptions; instead, selections have been made from only some of the courses to provide a sense of the students' experience.

Library Science 101, Effective Use of the Library

The first, basic course, Effective Use of the Library, has been taught with a stress upon the new term paper requirements. After one or two general assignments the young men and women are asked to start making bibliographies on various subjects of interest. So that they may learn various approaches to the theme, the search for materials is carried on during laboratory periods. Using Margaret Cook's New Library Key as a textbook, the students consider libraries as a whole, and the use of the Ferris library in particular. There is an assignment stressing the use of general and special dictionaries, and the value of using encyclopedias for a quick survey before starting to study the cards in the catalog.

As the students make the working bibliography on cards, they start learning the structure of the catalog card. Later, they use indexes, and compile a section on periodicals, followed by pamphlets if appropriate. The note cards, the outlines, and prefaces must be approved before the paper is begun. Finally, there should be a typed bibliography and footnotes. When the project is completed, the students have not only produced themes but have also learned to use the library.

While the lectures have stressed the Dewey Decimal system, the use of the card catalog, general reference books, and other subjects, there have been discussion periods, test periods, and other types of instruction. At the end of the course there will be an examination.

Library Science 102, Book Selection and Order Procedure

This course, as described in the college catalog, considers the general book selection principles and aids, for service in public libraries, school, and college. The purpose is to create better understanding on the part of all people who work in libraries, even though they may never take an active part in the book selection process. Since the work of the technicians, in the field of acquisition, is mainly one of searching in the various trade and other bibliographies, writing out order slips or full page sheets, checking invoices, collating, and accessioning, there is a stress on training for the work they will be given in future library positions. There will be many opportunities to gain experience through written assignments.

Unit I, Book Selection - 3 weeks

Texts: Cook, Margaret C. The New Library Key
Haines, Helen Living With Books
Wofford, Azile The School Library at Work
Minnesota Library School Notes and other mimeo material

During the first few weeks the stress will be on book reviews, booklists, trade bibliographies, and other lists. Assignments will give students the opportunity to examine and use the tools mentioned above.

Unit II, Book Selection and Ordering Techniques - 2 weeks

Texts: Cook, Margaret C. The New Library Key
Tauber, Maurice Technical Service in Libraries
Wofford, Azile The School Library at Work

Students will continue to handle and use various bibliographies, booklists and other tools. They will have experience in selecting books on different levels, according to general book selection principles. These titles will

be entered on library request cards and on duplicate order slips, as well as full page order sheets. There will be assignments which require searching.

Unit III, Handling Books Which Have Just Arrived - 3 weeks

Text: Fargo, Lucile The Library in the School

Students will learn about packing slips, invoices, opening and collating books. They will have experience in accessioning and in making shelf-list cards.

Unit IV, Budget Techniques and Financial Records - 2 weeks

Students will have several projects which involve the handling of financial record sheets and cost entries on duplicate order slips.

Library Science 201, Classification, Cataloging, Filing

The purpose of this course is to give the students a knowledge of the methods and purpose of classification, and general principles used in simple cataloging: assignments of call numbers, subject headings, personal name entries, added entry cards, rules for completion of full sets from main entry card tracing, use of workslips, and filing. Since the library technicians are expected to learn to follow directions minutely, the emphasis has been on making practice cards. It is impossible for the students to study the text thoroughly in the ten-weeks period allotted for this course. As a result, parts of the book are used for reference, only.

Unit I, Classification - 2 weeks

Interpretation and discussion, Chapter One, in textbook, Simple Library Cataloging, by Susan Grey Akers
Examination of Dewey Decimal Classification Tables, with Relative Index
Examination of Cutter-Sanborn tables
Practice in assigning Dewey Decimal numbers and Cutternumbers
Four practice sheets, used for assignment of Dewey Decimal and Cutter numbers

Unit II, Subject Headings - 1 week

Interpretation and discussion, Chapter Two, in textbook, Simple Library Cataloging
Use of book covers for discussion purposes. Each student is required to assign subject headings for twelve books, after studying the blurbs and other descriptive matter on the book covers
Four Practice Sheets of Authors and Titles (used for assignment of Dewey Decimal and Cutter numbers)

Discussion: Sears List; Library of Congress List; Purpose in Checking Lists

Unit III, Personal Name Entries - 1 week

Interpretation and discussion, Chapter Three, in textbook, Simple Library Cataloging
Practice in preparing authority cards, shelf-list, and main entry cards
Tracing
Practice in preparing a full set of cards

Unit IV, Main Entries - 1 week

Interpretation and discussion, Chapters Four-Seven, in textbook, Simple Library Cataloging

Class and laboratory practice in making full sets of cards
Assignment: Five complete sets for each class period

Unit V, Printed Cards - 1 week

Interpretation and discussion, Chapter Ten
Practice in completing full sets of Library of Congress cards

Unit VI, Use of Workslips - 1 week

Practice in making workslips
Practice in following directions on workslips

Unit VII, Filing - 1 week

Interpretation and discussion, Chapter Eleven
Filing project: All cards completed for class assignments

Unit VIII, Audio-Visual Materials, Sets, Serials - 2 weeks
Interpretation and discussion, Chapters Eight and Nine Review

Unit IX, Final Examination

Library Science 202, Circulation, Maintenance, Preparation of Materials

The course, as described in the college catalog, emphasizes the mechanical preparation of books for the shelves, the various circulation systems, the special problems connected with the handling of extraneous materials, binding and repair of books, library displays, and the inventory. The students will have the opportunity to give one oral report on a sheet of rules for a given library, and to compile a bibliography of books and other materials useful in planning a display. There will be several other papers required, so that the students will become accustomed to preparing neat, carefully written essays on various phases of library technical work. The final examination will cover all aspects of the subject.

Unit I, Mechanical Preparation of Materials - 1 week

Akers, Susan, Simple Library Cataloging (4th ed., A.L.A., p. 180-185)
Wofford, Azile, The School Library at Work (Wilson, 1959)

At this time there will be opportunities to practice lettering with a stylus. A discussion concerning problems in lettering will follow. The lectures will point out different methods of handling the preparation of books and other materials, and other jobs usually supervised by the cataloging department of a large library.

Students should be able to trace the progress of a book from the time it is received until it is placed on the shelf.

Unit II, Acquisition and Processing of Non-Book Materials - 1 week

Ireland, Norma (Olin), Picture File in School, College, and Public Libraries (Rev. and enl. ed., Faxon, 1952)

Wofford, Azile, The School Library at Work

The discussions will center upon the type of list used for choosing subject headings, the type of folders used, the labeling and marking of pamphlets, pictures and college catalogs. There will be stress upon the type of card to be placed in the college or public library catalog, and also the type of card used in the acquisition department, indicating the subjects formerly chosen and used in that library. Students will have the chance to put themselves in the place of a person or persons working on non-book materials in a given library. There will be an opportunity for the students to write up directions for preparation and circulation of each type of material.

Unit III, Circulation - 3 weeks

Geer, H.T., Charging Systems (A.L.A. 1955)
Wofford, Azile, The School Library at Work, Chapters 3-5

The lectures will point out the variety of methods used in setting up circulation systems. There will be emphasis upon the Newark system, and variations according to needs of individual libraries. Requirements will include oral book reports, and written papers stressing different types of circulation procedure. There will be stress upon the value of adequate registration records.

Unit IV, Maintenance of Library Materials - 1 week

Byrne, Brooke, Mending Books is Fun (Minneapolis, Burgess, c. 1958)
Copolan, K.M., Effective Library Exhibits (Oceana, c. 1958)

There is an emphasis upon the fact that books should first be considered from standpoint of binding or rebinding. Are the books worth mending? Should the books be discarded?

Unit V. Inventory and Display

Jesse, William, Shelf Work (A.S.A. 1952)
Loizeaux, M.D., Publicity Primer (4th ed., Wilson, 1959)
Tauber, M.F., Technical Services in Libraries (Columbia Univ., 1954)
Wofford, Azile, The School Library at Work (Wilson, 1959

Unit VI, General Discussions Concerning Circulation Work as a Whole. Review

Library Science 205, Library Problems

This final lecture and discussion course stresses the work of the national and state library associations; considers the different types of libraries (with reports required); studies the types of positions in each category, duties involved, and also the problem of securing and holding a position. The students are required to write two short papers and one term paper. There is one oral report.

Unit I - 4 weeks

Reading Requirement: Paradis, Adrian A., Librarians Wanted: Careers in Library Service, Chapters 4-13

Aim: To furnish the technicians with a general background of all types of libraries and their services.

Unit II - 4 weeks

Alsop, Guielma Fell, She's Off to Work, Chapters 1-3
Frederick, J. George, Standard Business Etiquette, Chapters 1-3
MacGibbon, Elizabeth G., Manners in Business, Chapters 1-6; 9-11
Wilson, Everett R. Getting Along With People in Business, Ch Chapters 1-31

Written Assignments:

Prepare, on cards, a bibliography of available materials (in Big Rapids) on the type of library in which you, the technician, expect to work. As the work progresses, the bibliography should be checked by the instructor. The outline should be approved at an early date. Notes should be taken on 5x7 cards. Footnotes and a printed bibliography are required.

Aim: To give the technician one more opportunity to prepare a paper in correct form, demanded as a research project. This experience in doing research in a field of interest will be a good review from standpoint of skills, and knowledge of subjects previously taught. The readings will emphasize correct procedure in writing applications, interviewing, in getting along with people, and in meeting the public.

Unit III, Special Job Orientation - 2 weeks

Informal reports on term papers and special job problems, including any which may have arisen during practice work.

Aim: To give the students a chance to discuss problems freely, and also, to unite ideas concerning various phases of the work.

This synoptic description of the Ferris courses is not complete but is presented to suggest the quality of student experience in Library Science. A fuller treatment would involve discussion of L.S. 103 (Reference) and the Library Practice course (L.S. 203 and 204). Lengthy and detailed assignment sheets are used in the supervision of the technicians in all departments of the library. Library work experience is provided at the Ferris Library and other libraries in the surrounding area.

Students and Jobs

Since Ferris is a residential college in a not too densely populated part of Michigan, the library technician classes are made up of younger students than in many other schools. Almost all of Miss Headings students are fairly recent high school graduates. The following discussion in Miss Headings' office with one of her students conveys something of student background and attitudes. This young lady was about to graduate and had been interviewed for a position in Midland, Michigan. Miss Headings introduced her.

Miss Headings: Incidentally, they called me and said they were very pleased with her personality, liked her as a person, and were interested in putting her into the position. She will be expected to take a

Civil Service Examination which does not include Library Science. This is her position, so I thought you would like to talk to her for a few minutes.

Interviewer: I certainly would. I'm particularly interested in going back a couple of years to the time you entered this program. When you came to Ferris did you come with the intention of becoming a library technician?

Student: Yes.

Interviewer: Then let's go back a step before that. How did you know what a library technician was, and how did you know that Ferris was a place where you could become one?

Student: When I was in high school I worked in the library part-time.

Interviewer: Where was this?

Student: In Mackinac City.

Interviewer: Was there a library club in the high school that provided student assistants?

Student: Yes, and Dr. Maddox, I think, spoke at a conference we went to in another city and talked about the program.

Interviewer: Dr. Maddox?

Miss Headings: She was the person who had this position before I came.

Interviewer: And she spoke at this conference for high school students?

Student: Yes. But I didn't come to Ferris directly. I went to Central Michigan for a year in teaching with a library science major. I didn't care for it too much so I decided to come over here and take the program

Interviewer: The program at Central would have been a four-year, Bachelor's Degree, program for school librarians?

Student: Well, for elementary teachers.

Interviewer: But you had known about the Ferris program?

Student: Yes, from the talk by Dr. Maddox.

Interviewer: And you have been here for two years now?

Student: Yes, but that makes three years altogether.

Interviewer: What you did at Central wasn't transferable?

Student: Well, I really didn't have very much library science there.

Miss Headings: You see, those people take it after they have passed much of their other course work. Most of the library courses are given after they have shown that they are capable of doing college work. The technicians, in contrast, have had all their courses within a two-year period.

Interviewer: So you can get into the whole library program much sooner by coming here?

Student: Yes, that's right.

The bulletin announcing the job opening which was mentioned at the beginning of the above interview is a standard Civil Service announcement from the City of Midland. It states that a competitive examination for the position of "Library Assistant" will be announced. The salary range is $3,645-$4,555. Quoting from the announcement:

THE POSITION: Under supervision, an employee in this class performs subprofessional work assisting a professional Librarian in book selection and circulation, records and general library service; and performs related work as required.

EXAMPLES OF WORK: Charges and discharges books and other materials from circulation desk; checks book reviews and keeps informed through constant reading of reviews and other materials; selects books for various collections; plans, outlines and prepares exhibits and displays, including maintaining necessary records, lists materials used and proper storage for future use; assists in compiling lists of available

materials at request of community organizations or individuals, and prepares and organizes materials for reserve display.

This position is not unlike others in Michigan public libraries which are being filled with graduates of the Ferris program. For example, Miss Headings reported that a graduate working in the public library in Mount Clemens, Michigan, has the following duties:

> Major responsibility is handling vertical, occupational, and local history files. She also does simple reference work, desk routine, filing, checking bibliographies, preparing booklists, typing catalog cards and correspondence.

In Ferndale, Michigan, a graduate is working as an assistant in the Reference Department with the following duties:

> Clipping local newspapers for the vertical file, as well as putting subject headings on pamphlet materials, sending for, and maintaining automobile manuals and college catalogs. The assistant will be assigned to the reference desk, under supervision. Some time is allotted to analytic cards for the file on plays.

Another recent graduate has taken a position as an assistant in the Book Selection Department of the Detroit Public Library, but a description of duties is not available.

Commentary

A consideration of the segment of the interview reproduced above, the job for which the student had applied, and other jobs which Ferris graduates are filling gives support to the contention that the Ferris program is successfully solving problems. That is, given the fact that public libraries want motivated employees for jobs above the clerical level; given the fact that students without strong aspirations for a B.A. degree nevertheless want library training; and given the fact of an educational institution oriented toward the problems of technical education, it is possible to operate a successful training program for library technicians.

The Ferris program evolved primarily in response to the needs of public libraries in smaller Michigan communities and did so with cooperation and support (including some scholarship aid) from the Michigan State Library. The program has also been able to provide library technicians for schools in Michigan. In short, it is doing what its designers hoped it would do. It is no criticism, therefore, to point out that no significant number of technicians for special libraries have been graduated. This point is raised simply because an industrial state such as Michigan undoubtedly has a considerable number of scientific, medical, technical, pharmaceutical and other special libraries which need library technicians. In view of the many scientific and technical subjects taught at Ferris, it would not appear difficult to establish special options for library technicians who would take the basic core of library subjects plus electives in a technical discipline. Along these lines, Miss Headings has already recommended that the possibility of a program in pharmacy be explored. Such a program would combine the library technician courses with courses in pharmacy, chemistry, biology and physics. The graduate of such a program would very likely find employment as a pharmaceutical literature specialist. The present requirements in Voice Transcription and Applied Typing would probably be eliminated in such a program.

While the library technician program at Ferris State College has been characterized here as successful, this does not mean that it is without problems. Primary focus, quite naturally, has been on the development of the curriculum, course content, and the work experience of the students. This necessarily has limited the resources which could be allocated to recruitment and placement activities. During the 1964-65 academic year a brochure suitable for high school seniors and entering freshmen was prepared. Future distribution of such literature on a widespread basis could change the student group in the program both quantitatively and qualitatively. Likewise, greater awareness of the program on the part of Michigan employers outside the library field could create in a relatively short time an increase in demand for graduates. If either or both of these developments occur, the physical facilities presently available for instructional purposes would very likely be put under stressed conditions.

Acknowledgment: The author is particularly indebted to Miss Bernice Headings and Mrs. Goldie Nott for the source material on which this report was based. Miss Headings provided extensive material (not included here) on the curriculum, courses, and students. Personal recollections and documents from Mrs. Nott helped provide an understanding of the early developments.

COMMUNITY COLLEGE PROGRAMS:

CITRUS COLLEGE

Azusa, California

Program Director - Mrs. Aline Wisdom

LOS ANGELES TRADE-TECHNICAL COLLEGE

Los Angeles, California

Program Director - Dr. Helen Earnshaw

MT. SAN ANTONIO COLLEGE

Walnut, California

Program Director - Miss Harriet Genung

The greatest concentration of library technician programs was found in the two-year community colleges of California. Since this type of institution, in California and elsewhere, seems likely to be the locus of an increasing number of programs, three of the more established programs in California are described here. For the purpose of a single illustration the program at Pasadena City College, Fullerton Junior College, or one of a number of others probably would have served as well. As a group, however, those selected provide an interesting contrast in the way three similar public institutions, in the same geographic area and responding to essentially the same manpower problems, have nevertheless evolved different but complementary solutions.

Background

The three schools are of distinctly different ages. Citrus College, founded in 1915, is one of the oldest junior colleges in California. Los Angeles Trade-Tech developed from the Frank Wiggins Trade School, which the Los Angeles Board of Education established in 1925. Mt. San Antonio College is of post-World War II origin, the Junior College District having been authorized by an election in December 1945. All three schools are tax-supported institutions and members of the Western Association of Schools and Colleges.

While the schools were founded at widely different times, their library training programs were not. Although some library course work was offered at Mt. San Antonio as early as 1949, the program did not operate as an organized curriculum until 1959. A similar reorganization of earlier classes into a seven-course curriculum took place at Los Angeles Trade-Tech in 1959. A single course in library science had been offered at Citrus College as early as 1942, and it was this course which the present Citrus librarian inherited when she came to the school in 1954. Over the next few years new courses were developed, and the new curriculum enrolled its first substantial group of students in the fall of 1960. Thus all three curricula were formed into what is essentially their present structure at about the same time (no major revisions having been made since).

Except for the beginning course at Citrus, which enrolls many general students who do not pursue the library curriculum, the enrollments there and at Mt. San Antonio are on the order of 8 to 10 students per course. The same was true at Los Angeles Trade-Tech through 1963; however, since then enrollments have grown to the point where the four courses offered in the spring of 1965 enrolled from 25 to 30 students each.*

A comparison of the course offerings and curricula as presented in the respective college catalogs provides some basis for characterizing the similarities and differences in these three programs. Discussion of these characteristics and some of the reasons for them are provided later.

* Beginning in the summer of 1963 Los Angeles Trade-Tech offered day classes in library science in addition to the evening classes that began in 1958.

Los Angeles Trade-Technical College

LIBRARY ASSISTANT ASSOCIATE ARTS DEGREE

Requirements for the Associate in Arts Degree in Library Assistant may be met by completing the Essential Courses below, and sufficient electives to meet the 60-unit requirement. Recommended Electives may be substituted for courses in the Library Assistant Major with Department Chairman approval.

Essential Courses	Curriculum	Course No.	Units	√
Reading and Composition I	English	1	3	☐
World Literature I	English	3	3	☐
English Literature I	English	5	3	☐
American Literature II	English	8	3	☐
Health Education	Health	10	2	☐
Intro. to Western Civilization I	History	1	3	☐
Intro. to Western Civilization II	History	2	3	☐
Polit. & Soc. History of U.S. I	History	11	3	☐
Polit. & Soc. History of U.S. II	History	12	3	☐
Library Services	Library Science	1	2	☐
Library Resources	Library Science	2	2	☐
Ordering Procedures	Library Science	3	2	☐
Circulation Procedures	Library Science	4	2	☐
Cataloging Techniques	Library Science	5	2	☐
Communications Media	Library Science	6	3	☐
Book Binding and Book Repair	Library Science	7	3	☐
Combined Activities	Physical Education	1	½	☐
Swimming	Physical Education	2	½	☐
Office Orientation	Secretarial Science	30	2	☐
Introduction to Sociology	Sociology	1	3	☐
Public Speaking	Speech	1	3	☐
Recommended Elective Courses				
Survey of Art History II	Art	2	3	☐
Business Law I	Law	1	3	☐
Principles of Economics I	Economics	1	3	☐
Report Writing	English	29	3	☐
History of Calif. & Pacific Coast	History	20	3	☐
Oral Communications	Industrial Supervision	11	3	☐
General Psychology I	Psychology	1	3	☐

Citrus College

Library Assistant

The curriculum outlined below is designed to prepare students for positions as library assistants and provides a well-rounded cultural background in addition to the specialized training in the techniques essential to library service.

First Year	Units		Second Year	Units	
English 1A-1B	3	3	Office Methods 31		3
Typing 22-23	3	3	Art 22	2	
Library Science 1	3	3	Health Education 10		2
Government 2	3		Library Science 1	3	3
History 7A or 7B		3	Literature	3	3
Electives	4	4	Electives	8	5
Physical Education	½	½	Physical Education	½	½
	16½	16½		16½	16½

Recommended Electives: History of Western Civilization, Public Address 1A, Life Science 2A-2B, Physical Science 1A-1B, Humanities, American Literature, Masterpieces of Literature, English Literature, Psychology 33, Statistics, Great Religions of the World.

Mt. San Antonio College

LIBRARY CLERK

The following curriculum is suggested for a vocational student who wishes to secure employment upon graduation as a library clerk. Emphasis is placed upon basic office training in addition to library techniques. Business Mathematics, Communication, Typing, Office Appliances, Human Relations in Business and Office Clerical Practice are included. Opportunity for a work experience program in a selected library is provided. It should be noted that this is not a pre-professional library curriculum. *The pre-professional student must meet the lower division requirements of the institution to which he plans to transfer.*

FRESHMAN YEAR	Units Fall	Spring	SOPHOMORE YEAR	Units Fall	Spring
Introduction to Library Science 54A-54B	3	3	Library Science 55A-55B	3	3
English 1A	3		Accounting 70	3	
Typewriting	3		Modern Language 1-2	4	4
Filing Systems 48	1		Health Education 1		2
Psychology 1A	3		Human Relations in Business 60	3	
American Institutions 50	3		Machine Calculations 53	2	
Office Appliances 65		3	United States History 50		3
Business Mathematics 11		3	Clerical Office Practice 38		4
Business Communications 30		3	Physical Education	½	½
Electives		4		15½	16½
Physical Education	½	½			
	16½	16½			

Los Angeles Trade-Technical College

LIBRARY SCIENCE

1.* Library Services (2).
The course familiarizes students with library ethics, types of library services, and libraries. It offers an orientation to all types of library work and includes field trips.

2.* Library Resources (2).
Students are instructed how to obtain information from the library through the use of card catalog, indexes, reference books, and other library materials.

3.* Ordering Procedures (2).
The technical procedures of ordering and processing books and other library materials are taught. Training includes making out order cards, preparing orders for agents, receiving books, preparing pamphlets, clippings, and related materials for circulation.

*** Courses marked with an asterisk carry one unit of credit for each 18 hours completed, others not so designated are evaluated on the basis of 60 hours being equivalent to 1 unit.**

4.* Circulation Procedures (2).
This course includes instruction in circulation and other public services; instruction in handling circulation desk, registering borrowers, sending over-due notices, answering simple location questions, and keeping circulation statistics.

5.* Cataloging Techniques (2).
Instruction includes typing catalog cards from master copy, cataloging simple fiction, checking shelf lists; assigning Cutter number, making cards for pamphlets, and ordering Library of Congress cards.

6.* Communication Media (3).
Instruction is given in newspaper stories, the use of book displays, public relations with clubs and organizations, and radio and television announcements as a means of reaching the public. The course also imparts knowledge of color and background and teaches speed lettering for charts, posters. and presentations.

7.* Book Binding and Book Repair (3).
Instruction is offered in the binding and repair of books, pamphlets and magazines in accordance with library standards. Students are also taught background material on the history of printing and bookbinding.

Citrus College

Library Science

1 LIBRARY SCIENCE (3)

This course is for students interested in employment in an industrial, school, government or public library. Philosophy, procedures, tools, techniques of library routine are emphasized. Typing catalog cards, bibliographies, book orders for teachers, correspondence, and other library records represent practical training. Five hours per week. Course may be taken for four semesters.

(Note: This is an overall description of four seperate courses, 1A, 1B, 1C, and 1D. A fifth course in Children's Libraries has recently been added to the curriculum. 1B is described in detail later.

Mt. San Antonio College

LIBRARY SCIENCE

54A *Introduction to Library Science* (3) Semester Fall

Three hours lecture.
Prerequisites: Pass English Placement Test and Arithmetic Fundamentals Pre-Test.

For students wishing to develop proficiency in the use of the college library and also designed for library clerks. Includes description of classification systems, use of card catalogue, basic library indices, bibliographic techniques, histories of libraries, books and printing.

54B *Introduction to Library Science* (3) Semester Spring

Two hours lecture.
Three hours laboratory.
Prerequisites: Successful completion of 54A and typing proficiency.

Introduction to library clerical techniques. Includes circulation systems and acquisition procedures, filing, business and library ethics, shelving and shelf reading, preparation of periodicals for binding, and simple book mending.

55A *Advanced Library Clerical Techniques* (3) Semester Fall

Two hours lecture.
Three hours laboratory.
Prerequisites: Library Science 54AB.

Clerical techniques in book ordering, book preparation and elementary cataloging.

55B *Advanced Library Clerical Techniques* (3) Semester Spring

Two hours lecture.
Three hours laboratory.
Prerequisites: Successful completion of 55A.

On the job techniques including use of staff manuals, job analyses and time and motion studies as they relate to specific library areas.

The Courses

A characterization of similarities and differences among these three programs would require a detailed examination of outlines for all courses. To provide such an overview in a less cumbersome fashion, common elements are identified on the following chart, and the amount of time spent in each of these areas is given in weeks of course time. A glance at the listings in the school catalogs, however, will quickly reveal that these programs have marked differences. Mt. San Antonio, for instance, uses the term "Library Clerk" and clearly emphasizes office skills in the work outside the library courses. Citrus and Los Angeles Trade-Tech use the term "Library Assistant," and their programs (exclusive of library work) conform more nearly to the typical liberal arts curriculum in California junior colleges.

The chart has been assembled from data in course outlines obtained from each of the schools. Since all libraries acquire materials (Ordering Procedures); shelve them in some order (Cataloging); repair and reproduce them in some manner (Technical Services); loan them to borrowers (Circulation); and answer the questions of users (Reference), it is presumed that library training will provide experience in these processes. The chart shows the number of weeks different library curricula devote to the five basic areas. All courses at Los Angeles Trade-Tech are two-unit rather than three-unit courses, as at Citrus and Mt. San Antonio; therefore, the number of weeks spent on different areas at Los Angeles Trade-Tech are listed here, for comparison purposes, as two-thirds the actual time spent.

Number of Class Weeks Devoted to Different Areas by School

	Los Angeles Trade-Tech	Citrus College	Mt. San Antonio College
Ordering Procedures	13	3	8
Cataloging	13 1/3	5	13
Technical Processes	12 2/3	2	3
Circulation	13	1	5
Reference	3 1/3	40	3
Other (including Library Administration and Audio-Visual)	34 2/3	21	41
Total	90	72	72

This chart was compiled from outlines of lecture sequences and therefore does not reflect the distribution of laboratory hours. The apparent discrepancy in total hours between Los Angeles Trade-Tech and the others would be reduced and the much greater number of laboratory hours expended by Citrus and Mt. San Antonio students in Circulation and Technical Processes would be more truly reflected if their laboratory periods were counted here. They are required to prepare a term paper on circulation procedures as well.

While the instructors at the three schools might not agree with this categorization in every detail, nevertheless, the chart does reveal broad differences. Both Los Angeles Trade-Tech and Mt. San Antonio give definite emphasis to media other than print, reflected in the figures for Other; Mt. San Antonio is unique, however, in its emphasis on administrative procedures. The heavy emphasis on knowledge of reference materials in a variety of subjects is the predominant characteristic of the Citrus program.

Though the apparent differences in time spent in Circulation would probably disappear if laboratory time were counted, the discrepancy in the figures for Technical Processes would not. The Los Angeles Trade-Tech students do receive broader experience in book binding and repair than their Citrus or Mt. San Antonio counterparts. There is a special reason for this. Printing and Lithographic Trades represent one of the very large departments of Los Angeles Trade-Tech. Within that department it is possible for a student to major in bindery work and become experienced in the operation of various folding, stitching, cutting, perforating and other industrial machines. While no attempt is made in a two-unit course to make bindery craftsmen of the Los Angeles Trade-Tech library students, their experience with the technical processes is quantitatively and qualitatively different from that of library technicians elsewhere.

Although there are certainly contrasts in each program whose general tendencies are displayed in the chart, there is also a consensus that every phase of library work should receive at least some attention. The program at Los Angeles Trade-Tech has most consciously aimed at a balance. The emphasis on liberal arts outside the library courses results in fewer typing or other office courses than either Citrus

or Mt. San Antonio requires. It would appear that students at all three schools do share some common core of basic library knowledge and experience, though it is acquired in different rates and amounts.

When the common elements have been identified and the contrasting tendencies observed, questions concerning the unique features of each program remain. The bindery experience at Los Angeles Trade-Tech has been mentioned, and the use of electronic data processing equipment in the Mt. San Antonio College Library certainly provides a special kind of student experience with circulation procedures. The courses described below provide a picture of the kinds of special emphasis that may occur in a particular school.

The fourth course at Mt. San Antonio, for instance, is entitled Advanced Library Clerical Techniques. The topics covered during the semester are the following:

Week	Hours	
1	5	The job analysis
2	5	The job analysis
3	5	The organization chart
4	5	The staff manual
5	5	On the job techniques
6	5	Personnel relations
7	5	Personnel relations
8	5	Work simplification methods
9	5	Work simplification methods
10	5	The principle of time and motion studies
11	5	The principle of time and motion studies
12	5	Rating sheets
13	5	The job application
14	5	Automation as it may affect the library clerk
15	5	Survey of automated methods
16	5	Survey of data processing methods
17	5	Term project reports and evaluation
18	5	Summary and Final examination

A course such as this is clearly designed to provide students with a fairly sophisticated understanding of library administration procedures. For example, the phrase "time and motion studies" probably does not occur in the course outlines of programs at any of the other schools visited during this survey. This is not to say that library administration is neglected in other programs, but it seems clear that it forms a very important part of subprofessional training at Mt. San Antonio College.

By way of contrast, the outline of Library Science 6 at Los Angeles Trade-Tech suggests the degree to which communication skills are emphasized there. That outline is reproduced below:

LIBRARY SCIENCE 6 - Communications Media

Instruction is given in newspaper stories, the use of book displays, public relations with clubs and organizations and radio and television announcements as a means of reaching the public. The course also imparts knowledge of color and background and teaches speed lettering for charts, posters and presentations.

CURRICULA:

Occupational - The student is taught the preparation and use of audio-visual aids and public relation techniques common to all libraries. Through such instruction, he will become better prepared for entrance into library work or for promotion on a staff.

OBJECTIVES OF COURSE (other than these included in the catalog description)

To acquaint the student with the public relations aspects of the library and its services.

To instruct the student in the writing of brochures and pamphlets and the writing and editing of articles for newspapers and periodicals.

To provide specific instruction in the preparation and presentation of short talks and announcements for radio and television.

To teach the art skills and their adaptation to library use.

TEXT: No specific text is assigned. Students are given selected references to cover the lectures and assignments based on such lectures and reading.

METHODS OF INSTRUCTION:

Lecture - 3 hours per week, covering the following units:

(1) Writing for publication- - - - - - 12 hours
(2) Techniques of speaking before groups and for Radio and Television - - - - - - - - - - - - - - - 8 hours
(3) Art Techniques and Skills - - - - 16 hours
(4) Library Displays - - - - - - - - - - 15 hours
Total - - - - 51 hours

Class Discussion Including Questions and Answers
Filmstrips, slides and films
Written Assignments on Lectures and Reading
At least 1 Field Trip to a Radio or Television Studio

METHODS OF EVALUATION:

Progress Records on each student
Evaluation of assignments
Tests - essay and objective - planned to take up 3 hours (1 1/2 hours at end of semester - to account for the 54 hours provided for in an 18-week course.

SUGGESTED REFERENCES:

Coplan - Effective Library Exhibits
Ballinger - Lettering Art in Modern Use. Reinhold
Becker - Television Techniques for Planning and Performance. Holt
Biegeleisen - ABC of Lettering, 2d edition. Harper
Dallman - Bulletin Boards. Educational Publications Corp.
Eisenberg - Commercial Art of Show Card Lettering. Van Nostrand
Ewbank - Broadcasting: Radio and Television. Harper
Johnston - Paper Sculpture. Davis
Loizeaux - Publicity Primer. 4th ed. Wilson
McPharlin - Paper Sculpture. Marquardt
Palestrant - Practical Paper Crafts. Homecrafts
Seldes - Writing for Television. Doubleday
Special Libraries Association - Our Library (A VISUAL PRESENTATION). Author

It should be remarked that communications media other than print are hardly neglected in other library technician programs throughout the country, but it is doubtful that many of them provide students with experience in this field to the extent that the program at Los Angeles Trade-Tech does.

The third outline presented here is the 18 course at Citrus College, which is usually taken in the second semester of the freshman year.

Week	Class Activity
1	Arrange schedule with classes and give outline for semester, reading assignments, etc.
2	Do reading assignments and take notes on reference work and publicity.
3	Lecture on bulletin board displays, reference work, and publicity.
4	Quiz on reading and lecture of first three weeks
5	Lecture on use of encyclopedias and give encyclopedia exercise.
6	Continue with encyclopedia exercise.
7	Lecture on indexes and discuss encyclopedia answers.
8	Lecture on dictionaries and discuss index answers.
9	Work on dictionary exercise.
10	Quiz on work covered to date.
11	Discuss test questions and lecture on biography.
12	Lecture on geography and discuss biography answers.
13	Lecture on history and check geography answers.
14	Continue to work on history.
15	Quiz on biography, geography, and history.
16	Discuss test and lecture on Social Science reference.
17	Continue work on Social Science exercise.
18	Discuss Social Science answers and review for final test.
19	Final test.

To this course is added in the next semester six weeks on reference materials in Religion and Mythology, Art, and Science. Finally, the fourth semester is devoted entirely to reference materials in music, philosophy, psychology, literature, business, health, medicine, applied arts and recreational subjects. It would probably be difficult to find another library technician program that offers as thorough preparation for reference work in school and public libraries.

Students and Jobs

All three of the schools under discussion enroll a considerable proportion of middle-aged women in their library technician programs. At Mt. San Antonio College a student

who was already employed in the College library described her background in the following interview:

Interviewer: How did it happen that you entered library clerical work?
Student: I had always wanted to be a librarian.
Interviewer: From what time? When did you realize this?
Student: When I was 14 I worked in the library at school - junior high school here in Los Angeles. But then I dropped out of high school.
Interviewer: But your junior high school had a library?
Student: Yes, and I did everything there. Then I went to high school and was very discouraged by the librarian. It was during the Depression and she said that even librarians couldn't get a job, so I lost interest in it. I got married, had my family, and then decided I should finish my high school education at least. I didn't really have any idea of getting into library work because that seemed too far above me. I went to high school in Alhambra around 1958. My children are pretty well grown, but I have a handicapped girl at home so I have to be home part of the day.

While I was going to Alhambra Night School to get my high school diploma I had to take what was called "Adult Guidance." This involved aptitude and psychological tests. When I told the man in charge of this program that I'd like to work in a library, he told me, "Why you could become a library clerk." And that's the first time I'd heard of it. So I learned that Mt. San Antonio offered the program, but to get here I thought I'd have to learn to drive. But then I found out about a bus I could take, and things just seemed to fall into place.
Interviewer: When was this?
Student: In 1960.

A similar interview was conducted during a visit to Los Angeles Trade-Technical College. This woman was a student in her second semester at the college.

Interviewer: Of all the things you could or will do with your life, how did you happen to enter the library program?
Student: Oh, I had always wanted to be a librarian. I always liked to read. I grew up in an age when there was no television. I came from the Midwest originally, of course this was 24 years ago, and reading was the only thing you had for entertainment when I was growing up.
Interviewer: Did you work in your high school library?
Student: No, I didn't. We didn't have a high school library. It's been 24 years since I was in high school so maybe they have improved it since then.
Interviewer: Did you go on to college?
Student: I got married and had two children. Now the children are grown, and I have a little more time on my hands.
Interviewer: How did you learn about this program?
Student: Through my son.
Interviewer: Did he come here to school?
Student: He comes to school now in a carpentry, cabinet-making program. I brought him down, because he did not drive at the time, and learned about this program. They don't advertise much, except by word of mouth.
Interviewer: That seems to be the general experience. But when was all this?
Student: This was last September.
Interviewer: So you started in the fall?
Student: Yes.
Interviewer: And you had had no previous college work?
Student: None.

(This student expects to finish the program in June 1966 and begin working.)

Upon graduation students such as those interviewed commonly find employment in the schools or public libraries of the Los Angeles area. The Los Angeles County Public Library, for example, employs library assistants whose general duties are described in the following terms:

Has immediate charge of a moderate-size branch of the County Public Library, acts as first assistant to Librarians in charge of large branch libraries, or performs sub-professional library work in the central or regional library headquarters, and performs such other duties as may be required.

Minimum requirements for this position include:

Completion of two years in an accredited college and six months' experience in an organized library or completion of a recognized training course in clerical library work. One year of library experience may be substituted for each year of college.

Graduates of the library programs of California community colleges can qualify for such positions. Graduates have also found employment in school libraries. Since it was not possible to meet with students at Citrus College, written statements were obtained from employers of Citrus graduates. One such employer is the Glendora Unified School District in Glendora, California. A letter from Mrs. D. Kelley, High School Librarian and Curriculum Center Coordinator included this statement:

> . . . For the past five years, all clerical staff members have come to us by recommendation of Mrs. Wisdom, Citrus College Librarian. The caliber of this personnel has been outstanding in every way, and most important, the students have received the optimum amount of help because of their excellent preparation for the job. When a student in our library asks for help, it doesn't matter if the staff person is certificated or classified, he can receive guidance and assistance because the clerical staff has been trained in library science. The most highly skilled stenographer would not be as valuable in a library situation as the type of personnel I have described.
>
> . . . Both our past and present school principals have been equally impressed with the responsibilities these individuals have assumed, and we deem ourselves most fortunate to be in close proximity to Citrus College's program.
>
> With the present shortage of librarians becoming more acute all the time, it is evident that some long-range alternate program will have to be considered by many school districts. I would think this would be especially true in the state of California.

That Mrs. Kelley's prognosis may already be the case is suggested by the fact that this survey produced information on library technician programs in 13 California community colleges. (No claim to be exhaustive is made here.) Had an effort been made, letters such as the one quoted above could have been obtained from the employers of not only Los Angeles Trade-Tech and Mt. San Antonio graduates but a number of other community colleges.

Commentary

Of the several efforts being made to train library technicians in California community colleges the programs of three have been characterized to illustrate contrasting approaches. It must be emphasized that contrasts rather than comparisons have been offered. To compare three curricula designed with different purposes in mind would be analogous to comparing cherries, apples, and plums. While it is true that all three are the fruit of deciduous trees, a taste for one is not likely to be satisfied by either of the others.

All three programs have evolved in response to the needs of public and school libraries in the Los Angeles area. Since all three appear to have enjoyed a comparable degree of success, it would appear that Los Angeles libraries have a variety of problems to which different types of students may make a variety of appropriate responses. This would appear to be an important lesson to be kept in mind in any future debates which may occur over "standards" to be promulgated as library technician programs grow.

These three programs and others throughout California demonstrate the pragmatic and spontaneous quality of the response community colleges can make to local problems. A necessary ingredient in such responsive behavior, however, is the flexibility that is built into the governing structure of terminal-technical education in California. One reason for the differences in the three programs which have been characterized is that decision-making in curricular matters such as these is done on a decentralized basis. The absence of a "State Plan for Library Technician Training" did not prevent more than a dozen community colleges in the state from offering library courses. Nor was there any requirement that each of these schools obtain advance permission from a state authority before offering the courses. The experience of at least one other state suggests that centralized control of curriculum development would have inhibited innovations in library technician training.

In conclusion, it might be noted that one of the innovations which has <u>not</u> been attempted in the California community colleges is the training of library technicians for scientific, technical or other special libraries. The three programs described here, and others in California, have been designed primarily with the needs of school and public libraries in mind. They appear to be accomplishing the tasks they have set for themselves.

Some of the graduates of these programs are undoubtedly working in special libraries, and the Advisory Committee of the program at Los Angeles Trade-Technical College recently approved the addition of a new course in special libraries. Nevertheless, it appears that technicians are not being specially prepared for work in the aerospace industry, medical centers, financial institutions, or other delineated library enviroments.

Acknowledgement: Considerable thanks are due Dr. Helen Earnshaw, Miss Harriet Genung, and Mrs. Aline Wisdom, Head Librarians respectively at Los Angeles Trade-Technical College, Mt. San Antonio College, and Citrus College, for the materials on which this report is based.

TRAINING TECHNICIANS FOR SCIENTIFIC AND TECHNICAL LIBRARIES:

ERIE COUNTY TECHNICAL INSTITUTE

Buffalo, New York

Program Director - Mrs. Ruth MacDonald

The library technician program at Erie County Technical Institute operated from 1953-54 through 1958-59 and was designed to meet specifically the needs of scientific and technical libraries (especially chemical). The only existing program of a similar nature, Salem County Technical Institute in Penns Grove, New Jersey, is described in a later section. The Erie program is covered in detail here because of its special features and because it was the subject of a Master's thesis at the University of Buffalo School of Education in 1958.

Throughout its history this program received strong support from members of the Western New York chapter of the Special Libraries Association, some of whom served as advisors to the program. Others provided work experience situations and later became employers of the program's graduates. During the five years the program operated there were usually 8 or 9 graduates per year with a total of 50-60 individuals who took at least some course work. The success of the program is attested to by the requests from employers which the school continued to receive for several years after the program was discontinued. The program was dropped in the face of more pressing administrative demands on the director's time. The Institute became engaged in building a new library, at which time Mrs. MacDonald, in effect, ceased teaching library technicians and devoted herself to problems of library architecture and construction.

The usual predominance of girls in library technician classrooms was an unbroken rule in the program at Erie County Technical Institute for a special reason. In a sense, the program did not prepare library technicians to work in chemical companies so much as prepare chemical technicians to work in libraries. The students coming into Mrs. MacDonald's classes were already well along toward an Associate in Applied Science degree in Chemical Technology. In their second (final) year in the Chemical Technology program girls were allowed to substitute the library technician courses for a regular course entitled "Unit Operations." "Unit Operations" involved visiting numerous chemical establishments in work clothes (climbing catwalks, etc.), which never proved too popular or successful with the girl students. Most of them found Mrs. MacDonald's library courses much more to their liking. It should be emphasized, however, that her students came to the problems of chemical literature with already demonstrated aptitudes in chemistry.

With the kind permission of Mrs. Ruth Lake MacDonald (the Institute's Librarian and Director of the program), relevant portions of her thesis are reproduced below.

THE ORGANIZATION, ADMINISTRATION AND TEACHING OF A COURSE IN LIBRARY TECHNOLOGY AT ERIE COUNTY TECHNICAL INSTITUTE

By Ruth Lake MacDonald

Chapter I

History and Philosophy of the Institute

The educational aims and the program available at the Erie County Technical Institute make it particularly suitable for the training of library technicians.

Erie County Technical Institute, along with four other institutes of its type, was established in New York state on March 18, 1946 as a tuition-free, two year technical institute for high school graduates. The purpose of its creation was "to explore the possibility of post high school education . . . which is to provide terminal sub-professional training for two year periods".[1] The fundamental policy recommended and carried out by the institutes included both technical and general education to find application in technical employment and community living. The curriculums were to include "basic preparation for selected arts, technologies and sub-professions which require a technical proficiency not reached in high school programs".[2] There were also to be "related offerings in arts and sciences . . . and instruction in English, social science and other liberal subjects considered essential to personal growth and citizenship".[3] In addition, whenever possible, the institutes were to provide work experience as an integral part of the educational program.

Originally the institutes were set up for an experimental period of five years and operated within the framework of the State Education Department. When the State University of New York was established by the State Legislature in 1948, however, the institutes became a unit in that group. The State University now comprises twenty-one colleges, six institutes and ten community colleges. Though separated geographically, all are united in purpose to improve and extend opportunities for youth to continue their education after high school.

The institutes, as part of the State University, continued to act as pilot plants in this new type of education. At the expiration of this experimental period they had proved their community worth and with the passage of the Community College Law in 1953 the operation of the Buffalo Institute became a function of the local community.

1 J. Cayce Morrison, A Guide to the Development of Programs for the Institutes of Applied Arts and Sciences, p. 14.

2 Ibid. p. 17.

3 The University of the State of New York. Regents Plan for Postwar Education in the State of New York, 1944, p. 14.

Chapter III

History of the Institute Program Of Library Training

After a considerable period of thinking, discussing, probing, evaluating and speculating the course in library training at the Institute came into being in the fall of 1953. Reference has been made in a previous chapter to the Special Libraries Association. Let us first take a look at the local situation and the influence of the Western New York S.L.A. group on Buffalo's educational venture.

In examining the yearly programs since the local chapter's organization in 1945 it is interesting to note that at the fall meeting in 1948 a panel discussion was held on the training of sub-professional assistants.[1] Several members of the panel mentioned

the need for training this group, other than through in-service training. Lacking this, they went on to explain the methods used to train such assistants on the job. It was during the discussion period following the panel that the writer first suggested the possibility of the Institute as a training center. The idea was enthusiastically received by the members.

In the fall of 1949 the writer began a survey among librarians of special libraries concerning the advisability of a two-year course for library technicians. This would have meant a regular full-time curriculum set up in the school in the same manner as the other eight curriculums. The purpose of the survey was to explore the potentiality of certain areas for general Institute expansion. Although the survey was not entirely completed or summarized, the discussions and correspondence on this matter were fairly definite on a number of points. A sampling was taken from libraries of large, medium and small size located in New York State. Many varied types of libraries were visited or contacted. Among those whose librarians responded were the following: head of a large University library with many branches, directors of two professional library schools, eight one-man industrial libraries, five special libraries having a staff of from two to four persons and the head of a local county library system. There was almost unanimous concurrence on the idea that the pay rate for non-professionals was too low at present to attract students for a full two-year training period before placement in a job of this kind. However, the suggestion was again almost unanimous that extension courses be given or that library techniques be worked in as a part of some other curriculum which would have suitable candidates for the library field.

At the December 1952 meeting of the local chapter of S.L.A. an education committee was created with the writer as chairman. The goal of the committee's work was to explore the feasibility of courses at the Institute, assist in defining the subject areas to be covered, and, if possible, get the first course under way by the fall of 1953. Several members of the organization who had expressed particular interest in the project and had contributed to the survey were appointed to the committee. They formed the nucleus of the original advisory committee to the Institute on library training.

This followed the formation pattern of other Institute programs based on the education law concerning this point which is specific about the creation of advisory committees. Such a committee is encouraged by the law to help develop the program, raise funds for promising students, arrange for co-operative work-study plans, help place graduates and render other assistance.

Meantime, Mr. E. Rexford Billings, Head of the Industrial Chemistry Department at Erie County Technical Institute, had expressed an interest in the proposed program based on requests to him from industry for girls with chemistry background who could also work in chemistry libraries. After an examination of the existing curriculums, background required in each, courses given in each and potential placement areas, it was decided that the Industrial Chemistry curriculum was the one most likely to have candidates suitable for library training and who could possibly be placed most easily in positions after training. Coupled with this was Mr. Billing's willingness to arrange time within his program for this new idea to be tried out.

The first library training advisory group met in August 1953 in the Institute Library. The original members were Mrs. M. Constance Parche' (librarian of the Carborundum Company, Niagara Falls, New York), Miss H. Rebecca Dane (librarian of the Linde Air Products Company, Tonawanda, New York) and Miss Elma T. Evans (librarian of Cornell Aeronautical Laboratory Incorporated, Buffalo, New York). Mr. E. Rexford Billings and the writer conducted the meeting.

Based on the experience of these industrial librarians, the first problem which was considered centered on the duties and responsibilities a library technician might be expected to carry out. Next,

the subjects that would consequently need to be included in courses to meet these requirements, equipment and materials necessary to operate the courses, best methods of instruction to meet these needs and the possibility of work experience were discussed.

How much of this could be accomplished within the make-up of the Institute program formed another problem. The number of quarters available for instruction and hours within each quarter determined the amount of time finally allocated to each subject to be taught. It was decided to take students in their senior year so that the basic courses would have been achieved, some work experience in industry accomplished and a certain sense of maturity attained. The Institute uses the designation "junior" for first year students and "senior" for second year students.

Table III (page 32) outlines the Industrial Chemistry courses for the junior and senior years. The library technology courses, as first planned, were to be offered as electives to girls in this curriculum only and as a substitute for the course entitled "Unit Operations". The library courses carry the same amount of credit as Unit Operations and the same degree of intensity in work load over the three quarters they are given.

Another issue which the advisory committee tangled with was that of classroom and laboratory space within the Institute appropriate for the teaching of the new courses. The writer presented facts, summed up briefly in Table IV ~~(page 34)~~ which verified the use of the Institute library area for this purpose. Likewise, Table V ~~(page 35)~~ illustrates some of the practices carried out in the Institute Library which approximate those in industrial libraries. These are listed only in so far as they relate to prospective duties of a library technician. The many additional responsibilities of the professional librarian are not the subject of this paper.

...The points stressed by individual committee members were combined and a tentative program arranged. The writer then went over the proposals more thoroughly, added detail, organized the material into suitable quarters of work and prepared copies of this report for the committees' further perusal.

On the basis of the suggestions offered by the advisory committee the following main areas were decided upon for coverage over the three quarters of instruction.

1. Orientation
   - What is a special library?
   - How does it serve industry?
   - Vernacular of the work
   - Library etiquette
   - Professional ethics
   - Company policies

2. Library Routine Procedure
   - Cataloging
   - Ordering
   - Inter-Library loans
   - Circulation of books, magazines, etc.
   - Accessioning
   - Filing cards, reports, government documents
   - Typing correspondence, bibliographies, cards, etc.
   - Preparing magazines, etc. for binding
   - Simple book repair and binding

3. Reference and Bibliography
   - General reference tools such as encyclopedias, dictionaries, technical dictionaries, foreign language dictionaries, atlases, etc.
   - Specialized reference tools such as Chemical Abstracts, Technical Book Review Index, Biographical reference books, etc.

TABLE III (PAGE 32)

INDUSTRIAL CHEMISTRY CURRICULUM

FIRST (JUNIOR) YEAR

First On-Campus Quarter		Credit Hours
Technical Mathematics	151	4
Mechanics and Light	151	5
General Chemistry	101	6
Applied Economics	101	3
Communication Skills	101	4
Coordinating Conference	101	1
Health Education	101	1
		24

Second On-Campus Quarter		
Technical Mathematics	252	4
Heat	252	5
General Chemistry	202	5
Probs. of Human Rels.	202	3
Communication Skills	202	4
Coordinating Conference	202	1
Health Education	202	1
		23

Third On-Campus Quarter		
Technical Mathematics	353	4
Electricity	353	5
Quantitative Analysis	311	6
Indus. and Labor Rels.	303	3
Communication Skills	303	4
		22

SECOND (SENIOR) YEAR

Fourth On-Campus Quarter		Credit Hours
Quantitative Analysis	412	6
Physical Chemistry	403	4½
Unit Operations	431	4½
Calculations of Analytical Chemistry	441	3
Industrial Safety	451	1
*Library Technology Option for Girls	461	4½
		19

Fifth On-Campus Quarter		
Qualitative Analysis	513	6
Organic Chemistry	521	5
Unit Operations	542	3
Industrial Stoichiometry	542	3
*Library Technology Option for Girls	562	5
		19

Sixth On-Campus Quarter		
Instrumental Methods of Analysis	614	4
Unit Operations	633	5
Industrial Stoichiometry	643	3
Organic Chemistry	622	5
Field Trips	652	2
*Library Technology Options for Girls	663	5
		19

*When these courses are taken in place of Unit Operations, the credit hours for each quarter total 19.

Magazines and magazine indexes such as Industrial Arts Index, Engineering Index, etc.
Handling technical reports
Book selection
Preparation of library reports and surveys
Professional societies and their publications
Documentation
Compilation of bibliographies and searches
Library bulletins — new materials available, etc.
Annotating

4. Division of Work by Quarters
Orientation and practice under supervision of the Institute Librarian and using the facilities of the Institute Library.

Library Routine Procedure and Reference and Bibliography under the supervision of the Institute Librarian and visiting area Librarians, members of Special Libraries Association.

Cooperative work for students for one quarter in industrial plant libraries.

The writer agreed to teach the course with the aid of guest lecturers provided through the courtesy of the advisory committee and other members of Special Libraries Association. With the approval of the report mentioned above by this group the course became a reality in the fall of 1953.

Recognition of the technical institute as an appropriate training center for sub-professionals continues to grow. One of the most recent groups to express this interest has been working on the personnel structure and policy applying to the library staffs of the State University.

In April 1955, a Report of the Committee on Library Personnel, State University of New York was submitted to Dr. William S. Carlson, President of the State University of New York. It stated that "the personnel structure in this report cannot be achieved without a sharp increase in the proportion and in the extent of responsibility of the non-professional staff".[3] To meet these needs "at present and in the immediate future the training of competent non-professional staff in library clerical and technical operations is a problem thrown entirely upon the individual unit library. If the extension of the clerical and technical service in State University unit libraries should take place and help to create a sufficient job market, consideration should be given to the institution of courses in library practice in the technical institutes."[4]

[1] Bulletin of Special Libraries Association Regional Meeting Toronto, Montreal & Western N.Y. Chapt. Oct. 8-9, 1948, Roch., N.Y.

[3] Report of the Committee on Library Personnel, State University of New York, April 1955, p. 23.

[4] Ibid, p. 24-25.

Chapter V
Summary

Has this course been worth while? This question can be only partially answered at this time. It will take a number of years of operation to fully appreciate the value of library training at this level.

On the positive side these facts appear to be already established. First, the Institute type of program represents one of the new educational trends of recent years. A concept of the Institute's philosophy, aims and method of procedure involves the indoctrination of the administration, faculty, student body, governing boards, industry and the entire community. An extensive public relations program has been one of the chief instruments used to attain this end.

The writer believes the course under discussion, which was set up within the framework of the Institute program, has been helpful in providing formalized education for sub-professional library assistants. One of the most important factors in helping

to attain this goal was the support given by the advisory committee and the scholarship committee. These groups had first to understand the program, then see it in operation and finally participate in it, and they as individuals and a group have helped to explain it to many others. In addition, in seeking the cooperation of outside groups for field trips, lectures, cooperative work jobs and final placement as well as general support, the same goal was continually expanded and strengthened.

There appears to be, also, a value to the student himself in taking this course. One of the aims stressed in the establishment of the Institute is personal growth and fitness for community living. The library technician learns to become self-reliant and at the same time to realize the breadth and strength of sources outside himself that can aid in solving many problems. Not only are community resources stressed but the inter-relationship of one group to another and the feeling of mutual service, support and helpfulness. Whether or not the student eventually accepts a position in the library field, he is better equipped to fill many jobs of other types. At the technician level a knowledge of research techniques is most important. There is every day evidence of the respect of other students for such knowledge in the writer's observance of students not in the library course seeking the aid and advice of those enrolled in the course. A discussion by class members at the end of each year has also revealed the fact that all of them felt they had handled their last year of school more efficiently because of the skills acquired during the course.

Have many actually accepted library positions? Of the five graduated in the summer of 1954, two are actively in the field. One of these has received a considerable promotion and is filling a job of important responsibility. Of the four graduated in 1955, three are employed in industrial libraries and one is doing special work for which she was selected on the basis of her library background. Many job opportunities have materialized at a time of year when students were not available for placement. Educating potential employers as to the most favorable time to seek library technicians when their graduation is a certainty is only one of many problems connected with this phase of the program.

At this point it is of interest to explain that an incident of note developed during the school year 1954-55. The writer accepted a part-time student into the course who already had a college degree. She took the same work as the other students and at the same hours and had the promise of a job as an assistant in the library of a local hospital when the course was completed.

This experience opens up a possible new phase of the program, that of accepting more part-time students. Persons wishing to fill positions in libraries that do not require a professional degree, and who can meet the prerequisites for entering the Institute program, could gain considerable library experience and background to better qualify for such jobs. At present the program has only been officially authorized in Albany as an elective course in the Industrial Chemistry curriculum. With this as a beginning, and with an extension program also available evenings at the Institute, it is possible to envision part-time students receiving training during either day or evening sessions. However, no certification or accreditation is available for such a program at the present time.

Although the Industrial Chemistry curriculum provides the candidates for the course as it is now given, it has been set up in such a way that it could be adapted to the background of students of practically any of the curriculums. This opens still another avenue of expansion for future consideration.

The need for dispersing information about this course, the correspondence, telephone calls, and many other requirements in seeking jobs and filling them involves many hours of time. The writer feels much of the success of the course will depend on the leg work done in this area to help create a demand for library technicians. This course has been set up and taught by the writer in addition to the regular duties of administering and operating a college library. The need for the future is the allowance of more time for continued evaluation of the course and to more fully explore the employment and public relations areas.

(Excerpts from a Master's thesis submitted to the University of Buffalo School of Education, February 1958. Reprinted by permission of the author.)

Commentary

While there is little that can be added by way of summation to the conclusion of Mrs. MacDonald's thesis, at least one rather obvious question must be recognized, if not answered: Why was a program which satisfied real needs discontinued? As recently as the spring of 1965 employers continued to call Mrs. MacDonald to inquire about the availability of library technicians with science backgrounds, even though she had graduated no such individuals for more than five years. There seems to be little doubt that the complex of scientific and engineering establishments in the Buffalo area needs the kind of library technicians Erie County Technical Institute could train.

It was not the purpose of this study to analyze the administrative problems involved in the relationship of educational, governmental, professional, and industrial organizations which impinge on technician training programs. However, it is impossible to visit programs in various parts of the country and not observe striking and perhaps important differences in their administration. The discontinuance of the Erie program cannot be "explained"; but some observations and questions can be suggested which should be taken as tentative hypotheses only.

For good or for ill, it appears that neither the New York Library Association nor the State Department of Education was involved in the Erie program to a serious degree. What the effect of more active participation of the state's important educational and professional authorities would have been cannot be known. The importance of the support which the Western New York Chapter of the Special Libraries Association (SLA) provided has already been remarked upon. This suggests another relevant observation. The members of the SLA who supported the program and employed its graduates were commonly in charge of technical information departments or libraries in industry. They were not the managers of those industries.

It is probably fair to state that industrial managers as a group were not nearly so conscious of the importance of technical information services in 1955 as they are in 1965. (This claim might be supported or invalidated by a frequency count of the number of training sessions or workshops in the field of information handling offered to its members by the American Management Association in the past 10 years.) In short, while Mrs. MacDonald received vocal and tangible support for the program from her colleagues, they were apparently unable to convince management that it should make the Institute's administration aware of management's desire to see the program continue.

This line of reasoning is admittedly conjectural, but apparently the threat of discontinuance did not subject the Institute's administration to anything like the pressure industry might have generated had the Chemical Technology program itself been curtailed. That this may be the case is suggested by the turn of events when the building program for the new library began. At that point Mrs. MacDonald was faced with the threefold task of administering the existing library, consulting on a regular basis with the architect in the design and construction of the proposed facility, and operating the library technician program. A considerable increase in staff support would have been necessary for her to serve as an administrator in all three areas. For whatever reasons (and cogent ones may have been advanced) the administration did not make the budgetary adjustments which the stress situation called for, and something had to be sacrificed. Erie County Technical Institute students continued to receive library services, students there today are served in an outstanding example of college library architecture, but the library technician program came to an end.

Considering the Erie program as an experiment in educational innovation, it seems not unreasonable to call the experiment a success. Certainly, valuable experience was gained by Mrs. MacDonald, her students, and all those who participated in different aspects of the program. Hopefully, the lessons of that experience can be helpful to other programs. One such related effort, the relatively new program at Salem County Technical Institute in Penns Grove, New Jersey, is described in a later section.

Acknowledgment: Thanks are due to Mrs. Ruth MacDonald not only for permission to reproduce chapters of her thesis but also for much additional information.

NIGHT SCHOOL PROGRAMS:

THE GRADUATE SCHOOL OF THE U.S. DEPARTMENT OF AGRICULTURE

Department of Agriculture

Washington, D.C.

Director - Dr. John Holden

BALLARD SCHOOL OF THE YWCA

610 Lexington Avenue

New York City 22, N.Y.

Director - Mrs. Mary John

Two of the oldest and most successful training programs for library technicians are offered by institutions that do not grant degrees. These are the programs at Ballard School of the YWCA in New York City and at the U.S. Department of Agriculture (USDA) Graduate School in Washington, D. C. Introduction to Library Techniques was offered for the first time at the USDA Graduate School in the fall of 1948. Library Clerical Practice was first offered at Ballard School in the spring of 1949. Both programs serve students with full-time jobs, in classes offered only at night. Graduates of both programs tend to be employed in special libraries rather than public or school libraries. For these reasons it seems logical to consider these programs together.

BACKGROUND

The Ballard School is located at the Central Branch of the YWCA on Lexington Avenue in Mid-town Manhattan. For many years the YWCA and Ballard School have served the educational, cultural, recreational, and residential needs of young women in New York City. A wide variety of adult education courses are offered at Ballard School, ranging from the strictly practical and vocational to the purely cultural and intellectual. Operating within the tradition of a well-established service organization, Ballard School, not unexpectedly, pursues educational goals with a pragmatic service orientation.

For the library clerical program to become established, Ballard's receptivity to educational innovation had to be matched with expertise in the subject area. This was, and continues to be, provided by the New York Chapter of the Special Libraries Association. The origin of this collaborative effort was described in the November 1949 issue of Special Libraries by Miss Elizabeth Ferguson, Librarian of the Institute of Life Insurance in New York City. Quoting from Miss Ferguson's article:

> . . . The urgency of this problem (training of assistants in special libraries) was thoroughly discussed as part of a closed session on library education at the 1948 SLA Convention in Washington, D.C., arranged by Mrs. Ruth Hooker and conducted by Verner Clapp of the Library of Congress. The views expressed at this meeting summarized so well the thinking of the profession that they were reported in Special Libraries in November 1948.
>
> Taking their cue from this discussion, the Executive Board of the New York Chapter, under the leadership of Gertrude Low, president, decided, in the fall of 1948, to tackle the problem as a local project. The members first approached it, as they had so often in the past, with the idea of setting up a course and handling it within the Chapter itself. There was in the group plenty of talent, willingness and experience. . . . The Board's plan, however, carried with it two serious difficulties: (1) such a class was a heavy extra-curricular burden on those people responsible for it; (2) and it did not have the recognition and prestige of a class connected with an established school.
>
> In view of the many inadequacies of the original plan, the board determined to try a completely new approach. It decided to investigate whether an elementary course could not be successfully conducted in a business school. New York seemed an ideal place for the experiment since it has business schools of many types and since a large group of library assistants are employed in the area.
>
> The author was appointed as chairman of a committee to investigate the possibilities which a New

York business school might be willing to work out along this line.

. . . The Ballard School of the Y.W.C.A. expressed great interest in the idea and was willing to make arrangements to include a 12-week course in its 1949 spring term. This school has a distinguished record in vocational courses because it has been successful not only in practical training but also in inspiring in its pupils good conscientious attitudes toward jobs. It is somewhat unique among the New York Schools in that its policy has always allowed for experimental courses. The School and the Y.W.C.A. employment service with which it works closely have a broad base of experience with all types of clerical jobs. Altogether, the committee thought, there could not be a more desirable place for a trial course.

The School authorities, in the planning sessions, asked to be informed fully about the jobs for which the course would offer training. They also drew into the discussions top-flight personnel directors who regularly served on their advisory committees. These outside experts in the general vocational field forced the library group to do some serious stock-taking about its job situation.

Specifically they wanted to know such things as: What are the jobs like? How many of them are there in this area? How are the people hired - from a clerical pool in the office or through outside agencies? What are the opportunities for advancement? What do the jobs pay?

To gather statistics to answer these many questions the committee sent out a questionnaire to the 450 libraries represented in the New York Chapter. About 120 of them responded and furnished some interesting facts - 90 of these employ a total of 215 clerical assistants regularly. The average number per library was one or two although some few have as many as ten. More than half hire assistants from within their organizations. The salary most frequently reported was from $35 to $40 a week. A sizable number indicated that they would cooperate by sending students to the class if it was established. These figures helped to assure the school that there was a big enough job market to make the course worth-while.

The Ballard executives accordingly were willing to undertake the adminstration of the course as part of their regular curriculum. They stated, however, that they would have to depend on the library group to recommend a teacher and to advise on the content of the study. They would also need assistance in selecting the students who would be admitted.

. . . As a result of all this careful joint planning, the enrollment in the initial course on April 4, 1949, far exceeded original expectations. It was conducted in two sections of 25 students each; and in addition, some 20 applications were carried over for the fall class.

("New York Chapter Experiment in Sub-Professional Training," p. 355-361)

Since 1949 more than 1,000 people have taken advantage of the courses offered at the Ballard School. This is undoubtedly the largest number of students having enrolled at any one of the institutions investigated in this survey. Before describing the later history of this program, however, the background of the program at the USDA Graduate School will be presented.

The need for an organization such as the USDA Graduate School was expressed as early as 1898 and derives from the original Congressional mandate of 1862 which gave the Department of Agriculture responsibility to "disseminate agricultural information in the broadest sense of the word." After World War I the demand for qualified personnel in the Federal Government became acute, and a special committee was appointed by the Secretary of Agriculture in 1920 to study possibilities for continuing education. After examination of the findings of that committee and consultation with other government departments, the Secretary established the school in 1921. The current catalog states the purpose of the school in the following terms:

> The objective of the Graduate School of the United States Department of Agriculture has always been to improve the Federal Service by providing needed educational opportunities for Federal employees. The Graduate School has six main programs: resident evening, special, correspondence, international, public lectures, and the press. Graduate study is a primary interest of the School, but it also offers a large number of undergraduate as well as non-credit courses. All courses are open to qualified employees of the Federal Government and to other qualified persons as facilities permit.

The Graduate School does not grant degrees and has never sought to do so. It does give certified statements of accomplishment. In addition to the certificate in library techniques, statements of accomplishment are offered in such fields as accounting, editorial practices, natural history, field studies, statistics, surveying and mapping, and others. While the Graduate School shares with Ballard a concern for general adult education it serves a different student population with more pronounced needs in the scientific, technical and administrative fields.

The library program at the USDA Graduate School reflects this difference to some degree in its advanced and specialized courses. The basic courses, however, probably have considerable similarity with the Ballard courses. Both programs are offered at night to students with full-time jobs. Many, if not most, of the students are already working in specialized libraries. In Washington the students are employed in government agencies, for the most part, while in New York City the students come largely from commercial or industrial establishments. Both programs require only a high school diploma as an entrance requirement, though both of them enroll a certain number of college graduates. Tuition is $28 per course at the USDA Graduate School and $26 at Ballard.

THE CURRICULA

Neither school presents a full curriculum in the same sense as the community colleges, four-year institutions, or technical institutes described elsewhere. That is, a series of courses is offered in the library field, but there are no outside requirements like those for the Associate of Arts degree in the community college library programs. This statement requires qualification in the case of students who wish to acquire the "Certified Statement of Accomplishment in Library Techniques" at the USDA Graduate School. Five elective credits beyond the basic library courses are required, some of which are not library courses in the strict sense of the term.

The following statement appears in the USDA School catalog for the 1965-66 academic year:

Certified Statement of Accomplishment in Library Techniques

A Certified Statement of Accomplishment in Library Techniques is granted to a student who has completed an organized course of study intended to provide basic training in this field. Graduation from high school, or the equivalent, is the minimal educational background required. An applicant for the certificate must file a transcript of his high school or college record before completion of his certificate program.

Requirements

1. Demonstrated facility in English grammar and composition. This requirement can be met by the successful completion of an examination given as part of the course, Introduction to Library Service.

2. 20 semester hours of credit with an average grade of B or better in the following courses:

a. Required courses: (15 credits)
Introduction to Library Service (2)
Introduction to Cataloging and Classification (2)
Cataloging and Classification II (2)
Principles of Library Organization (2)
Basic Reference Service and Reference Tools (2)
Introduction to Bibliographic Science (2)
Library Techniques—Seminar (3)

b. Electives: (5 credits)
A Foreign Language
Administrative Procedure (2)
Documentation (2)
Documentation in Science and Technology (2)
Indexing (2)
Law Librarianship (2)
Maps and Charts (2)
Medical Terms Simplified (2)
Official Writing (2)
Principles of Editing and Their Application (3)

Other courses may be approved depending upon the needs of the student.

A student seeking this certificate should consult with the Registrar and obtain approval of his proposed course of study early in his academic program. Equivalent courses will be accepted by transfer from other institutions.

THE COURSES

The course descriptions as they appear in the USDA Graduate School catalog are reproduced below:

The following are nonprofessional library courses. They offer background information and training for the subprofessional library assistant and others whose work requires knowledge of library techniques.

2-125. Introduction to Library Service

Fall, 2 credits

Leila P. Moran, Kirby P. Payne, and Associates

Basic course for those expecting to pursue curriculum leading to nonprofessional certificate. Outlines purposes, procedures, techniques, development, and trends of librarianship. Individual assignments and conferences with students working toward the certificate. *Prerequisite:* Practical English Usage, or equivalent determined by basic English examination given prior to acceptance in course.

2-135. Introduction to Cataloging and Classification

Fall, 2 credits

Robert L. Birch
Salme H. Kuri
Elizabeth L. Tate

Organization of library material. Card catalog and auxiliary records. Cataloging rules and routines. Review of cataloging systems. Classification routines and review of classification systems.

2-139. Cataloging and Classification II

Spring, 2 credits

VIRGINIA CUNNINGHAM
SALME H. KURI

Discussion of more difficult problems in descriptive cataloging, classification, and subject headings. Cataloging of practice collection. *Prerequisite:* Introduction to Cataloging and Classification, or one year's library experience.

2-137. Basic Reference Service and Reference Tools

Fall, 2 credits. Repeated in summer

ROBERT M. PIERSON

Designed to help the student learn how and when to use large number of important or typical reference books or sets of books, such as dictionaries, encyclopedias, indexes, atlases, and yearbooks.

2-138. Introduction to Bibliographic Science

Fall, 2 credits

JOSEPH T. POPECKI

Bibliographic science and bibliographic style for beginners. Variations and forms of bibliography. Study and comparison of general bibliographic tools and indexes of chief importance.

2-136. Principles of Library Organization

Spring, 2 credits

JOSEPH T. POPECKI

System and function of a library based on component parts and services that obtain regardless of size or purpose. Organization of function and service for utmost efficiency.

2-145. Law Librarianship (1965–66 *and alternate years*)

Spring, 2 credits

JACK S. ELLENBERGER

Survey of law library administration with emphasis on research methods in primary and secondary authorities, international law, government publications, and work with Federal legislation. *Prerequisite:* Training in law or library work, or equivalent experience.

[2-114.] Maps and Charts (1966–67 *and alternate years*)

Fall, 2 credits

CATHERINE I. BAHN

Survey to give analyst, researcher, librarian or teacher working with maps understanding of both domestic and foreign maps and charts, the agencies that produce them, their catalogs and indexes, and their availability in map libraries. Study of United States, foreign, and international mapping activities on workshop basis to permit presentation and solution of individual problems. Pertinent information on map libraries, reference facilities, map acquisition, cataloguing and processing procedures and techniques. Presentation of maps, charts, reference materials, aids, and tools for laboratory use.

2-152. Documentation

Spring, 2 credits

JOHN SHERROD

Introductory survey designed to acquaint the student with many general topics involved in locating, organizing, and communicating specialized knowledge. Use of non-conventional systems in libraries and other information services.

2-420. Documentation in Science and Technology

Fall, 2 credits

JOHN SHERROD

Designed for engineers, research managers, scientists, and professional personnel engaged in technical information programs. Survey of availability and utilization of scientific and technical information from government, industrial, university, and other sources. Emphasis on non-conventional system design and implementation for optimizing communication of scientific and technical information.

2-160. Library Techniques—Seminar

Fall, 3 credits. Repeated in Spring

JOHN SHERROD

Overall summary and review of practical problems in library operations. Emphasis on work with the individual student. Special readings in literature of librarianship. Open only to the student who has completed all other requirements for a Certified Statement of Accomplishment in Library Techniques, including B average in all courses taken.

LIBRARY CLERICAL COURSES

ELEMENTARY CATALOGING The simple theory of cataloging and its practical application as needed by assistants to catalogers or catalogers of very small libraries. Prerequisite: *High School diploma and typing.*

Nathalie D. Frank, B.A., Barnard; B.S. in Library Science, Columbia University. Head Librarian, Geyer, Morey, Ballard, Inc.

Monday, 8-9:50 p.m. April 6-June 22

12 classes, $26

SUBJECT FILING AND INDEXING Classifying and arranging material; planning a subject classification for various types of industries; cross referencing; preparation of indexes to the subject file. Course includes "on location" sessions in libraries of several large corporations.

Ann McDonald, librarian, Market Research Department, Union Carbide Corporation, Chemicals Division. Former president of Records Management Association of New York.

Thursday, 6-7:50 p.m. April 9-June 25

12 classes, $26

FIELD EXPERIENCES IN SPECIAL LIBRARIANSHIP A series of field visits to such operations as a technical magazine publisher, a data processing center, a bookbinder, plus orientation and evaluation sessions. First and last sessions held at YWCA.

Robert E. Kingery, Chief of Preparation Division, New York Public Library.

Thursday, 4-5:50 p.m. April 9-June 25

12 classes, $26

BASIC LIBRARY OPERATIONS Survey of clerical and technical procedures in libraries, including acquisition, binding, preparation and storage of library materials, duplicating methods, circulation and routing techniques, etc. Includes consideration of related library forms, records, supplies and equipment. Lectures, demonstrations and field trips.

Mr. Kingery.

Monday, 6-7:50 p.m. To be given in September, 1964

12 classes, $26

ELEMENTARY REFERENCE WORK Covers basic reference books, indexes, microfilm, newspapers, government documents and bibliographies.

Mr. Kingery.

Thursday, 6-7:50 p.m. To be given in January, 1965

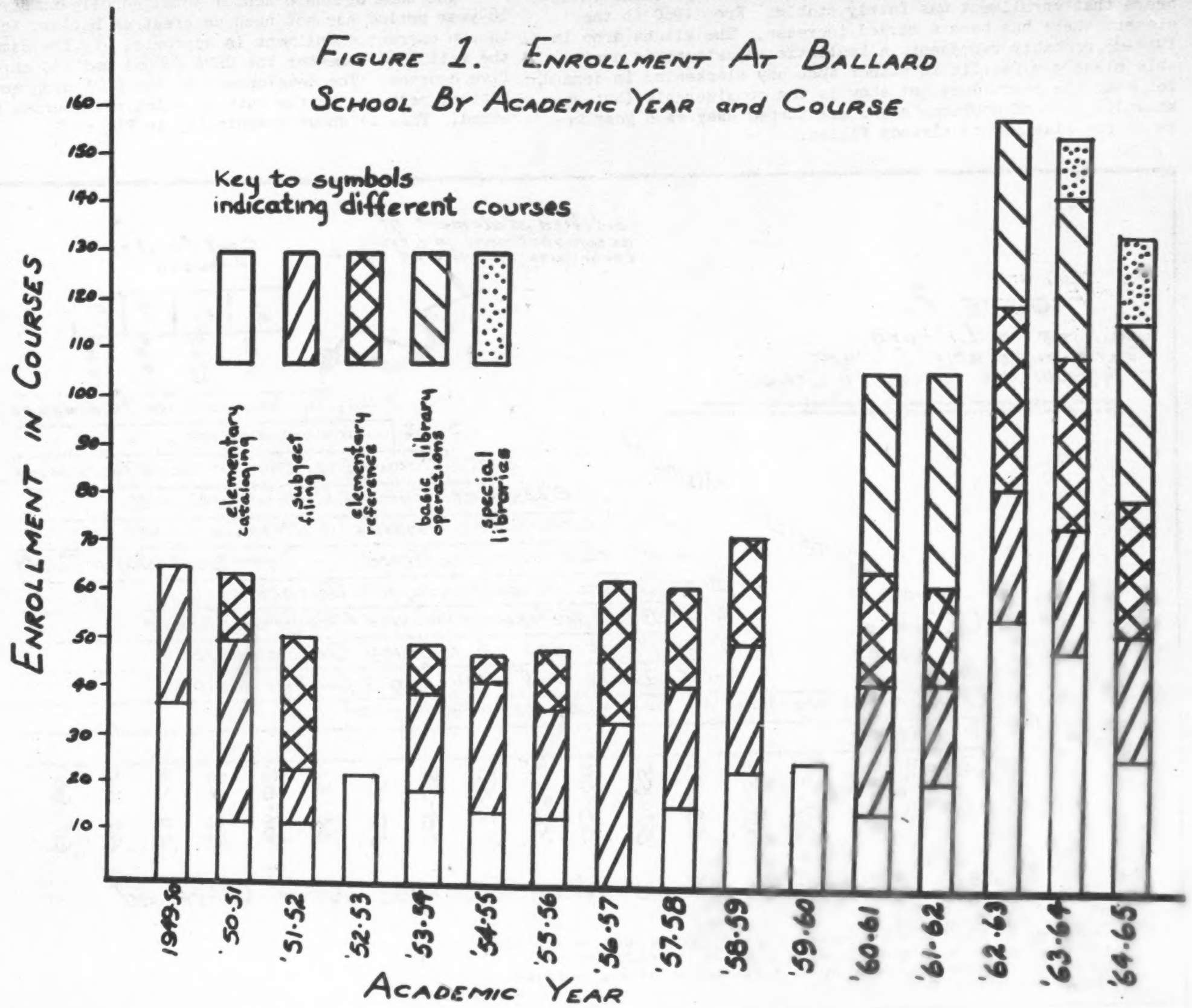
12 classes, $26

Course descriptions listed in the 1964 Fall catalog of Ballard School appear at the left.

While the USDA courses serving special needs in law, cartography and scientific documenation increase its offerings, its basic courses in Cataloging, Reference, Introduction to Bibliographic Science, and Principles of Library Organization bear strong resemblances to the Ballard courses. The Ballard program appears to provide more field trip experience, while the USDA Graduate School offers its students a final seminar course providing an overall summary and review of practical problems in library operations.

Unlike courses at degree-granting institutions (which are usually designed as a total curriculum), the list of course offerings at Ballard and the USDA School grew a step or two at a time. The original Ballard course, Library Clerical Practice offered in the spring of 1949, fissioned into two courses within a year. These were Elementary Cataloging and Subject Filing courses and are currently so listed in the catalog. In the spring of 1951 Elementary Reference Work was added. These three constituted the course offerings until the fall of 1960, when Basic Library Operations was offered. Field Experience in Special Librarianship appeared first in the fall of 1963 but has since been replaced by a counterpart entitled New Dimensions in Special Library Work. Figure 1 (following page) shows the growth in enrollment at Ballard School during a 16-year period.

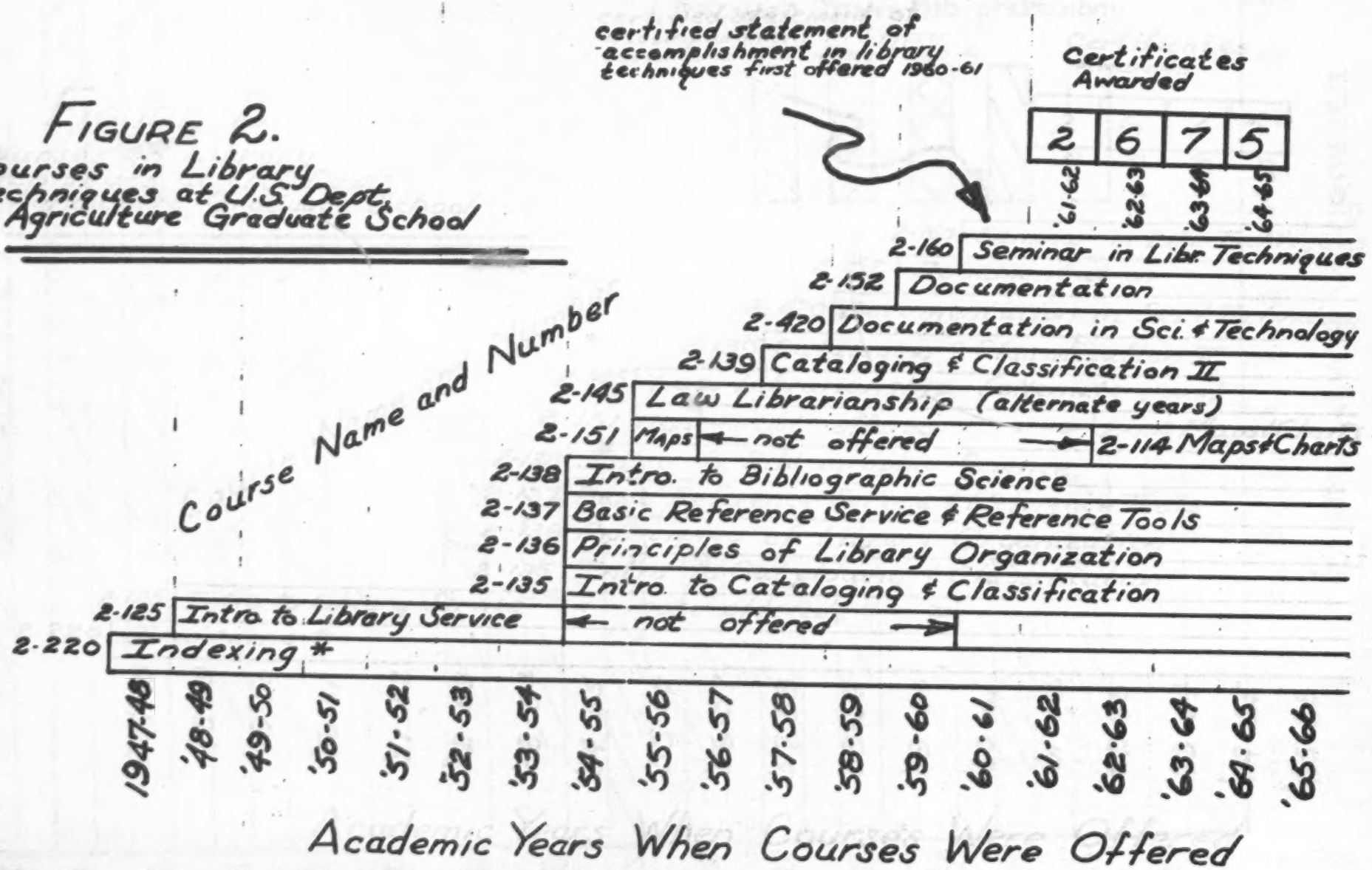
Figure 1. Enrollment At Ballard School By Academic Year and Course



For the first 10 years of the program at Ballard School it appears that enrollment was fairly stable. From 1960 to the present there has been a marked increase. The slight drop in 1964-65 probably represents a realistic adjustment to available classroom facilities rather than any slackening in demand, for what the chart does not show is the considerable (but unknown) number of applicants who are turned away each year because the classes are already filled.

The USDA Graduate School total enrollment during the same 16-year period has not been as great as Ballard School, although current enrollment is approximately the same. During the fall 1965 semester the USDA School had 150 enrollments in five courses. The development of the USDA program is measured better, perhaps, by the rate at which new courses have been added. This is shown graphically in Figure 2.

FIGURE 2.
Courses in Library Techniques at U.S. Dept. of Agriculture Graduate School



* Indexing (2-220) is not a library course, per se, but is included here because it is a recommended elective. 2-220 is an Editorial Practices course in the preparation of the indexes to book manuscripts.

The development of the program at the USDA Graduate School appears to have proceeded through three stages: 1947 through 1954, when a general introductory course was given; 1954 through 1960, when a conscious effort was made to increase the course offerings to library subprofessionals; 1960 to the present, during which time the Certified Statement of Accomplishment has been offered, and the program has been completed with a seminar. Future growth of the program appears likely to be marked by organizational changes within the existing list of course offerings rather than by continued additions to the list.

STUDENTS AND JOBS

As mentioned earlier, most of the Ballard students are already employed in commercial or industrial establishments. A list of employers of Ballard students during 1957 and 1958 was compiled by the school and is reproduced below. A comparable list today would undoubtedly be much larger since the marked increase in Ballard's enrollment took place after 1960; but the character of the list would probably be similar.

American Council to Improve our Neighborhoods
American Cyanamid Company
American Foreign Insurance Association
American Heritage
American Iron and Steel Institute
American Journal
American Machine and Foundry Company
American Standards Association
ASCAP
Association of Casualty and Surety Cos.
Atlas Corporation

Batten, Barton, Durstine and Osborn Inc.
Bloomingdale's Book Dept.
Brooklyn Public Library

Chadbourne, Parke, Whiteside and Wolf
Chain Store Age
Chemstrand Corporation
Commonwealth Fund
Consumers Union of US
Creole Petroleum Corporation
Cultural Affairs Dept. - Austrian Consulate

Daniel S. Mead - Literary Agent
Dept. of Commerce
Doherty, Clifford, Stern and Steinfeld Inc.
Dunn and Bradstreet

Edison Electric
Engineers, Construction and Business Consultants
Equitable Life Insurance
Evans Research & Development Corporation

Federal Reserve Bank
Fletcher Richards Advertising
Ford Foundation
Foster Snell

General Electric Company
Girl Scouts of America

Hanover Bank
Harper Brothers
Henry Katz
Hill and Knowlton - Public Relations
Hospital for Crippled Children

Industrial Relations Counselors Inc.
Institute of Muscle Disease
International Minerals and Metals
International Nickel

J. P. McKenney

Lehman Corporation
Lever Brothers
Lipton Inc.

Manhattan Savings Bank
McKinsey and Co.
Mercantile Library
Merrill, Lynch, Pierce
Metropolitan Life
Metropolitan Museum of Art

National Committee on Aging - Soc. Welfare Ass'n.
National Council of Churches
Newark Museum
New York Heart Association
New York Life Insurance Co.
New York Public Library
New York Times Publishing Div.
New York Times Information Div.
Norton and Gross

Otis Elevator

Paramount Pictures

Record Contracts Inc.
Rockefeller Foundation

Scientific Design Co.
S. B. Penneck & Co.
Shell Chemical Corp.
Socony Mobile
Standard Oil of N. J.
Stewart Douglas & Co.

Tax Foundation Inc.

US Army
US AIS School Library
US News and World Report
US Steel Corporation

William Rosenbury Manufacturers
Winthrop, Stimson, Putnam and Roberts

YWCA

Of the companies on this list 25 had more than one employee enrolled in one or more library clerical courses; 4 companies had four or more employees enrolled. The most remarkable feature of this list, perhaps, is the very small number of institutions which can be readily identified as libraries. One question which such a list suggests is: If organizations like these in New York City need personnel with library clerical training, how many of their counterparts in other cities have similar needs?

A comparable list of employers of the students at the USDA Graduate School is not available. Employers are known to include the libraries of The National Science Foundation, The Atomic Energy Commission, Howard University, The Veterans Administration, and The Library of Congress. Students and graduates of the program were interviewed in their working environments to determine their attitudes toward the program. There was general agreement that they would not have been promoted to their present civil service grades nearly as quickly (if at all) had they not taken the library techniques courses.

The case of a young employee of a major scientific agency in the federal establishment offers a pointed illustration of what library technical training can mean for an individual.

The individual is a 21-year-old man who came to the agency as a grade GS-3 clerk immediately upon graduation from high school three years ago. He had worked for the agency on a part-time basis during his senior year in high school in a cooperative program of vocational education established between his school and a number of Federal agencies. He wanted to attend college (and still may) but during high school could not contemplate it. As a Commercial student in high school he was eligible to participate in the cooperative work-study program, and quite by chance he was assigned to the library of the scientific agency.

He had never contemplated a career in library work but found the work challenging and interesting. Another employee was taking library courses at the USDA Graduate School, and early in 1963 the young man began working toward his certificate in library accomplishment. He expects to complete his courses in the spring of 1966; he will probably attain the GS-5 grade in the very near future; and before long he intends to take the Federal Civil Service Entrance Examination. If he scores well enough on this examination he will be eligible for a new series of promotion in coming years. In short, he seems likely to achieve considerably more than one might predict on the basis of his high school diploma in commercial studies and his lack of any university work.

Analyzing this situation, it appears that at least three important factors can be identified: (1) a work-study experience in high school that exposed him to the nature of library work; (2) the offer of employment in the library upon graduation, where he began to appreciate the importance of acquiring knowledge and began to develop real motivation for learning; (3) ready access to further training in library work at a time when he was motivated in that direction. Access in this case means not only that the USDA Graduate School program was close at hand but also the willingness of his agency to underwrite some of the tuition costs.

Similar case histories were related in the course of interviews with other USDA School students and their supervisors. The Chief of the library at another Federal scientific agency described his attitude toward the USDA Graduate School program in a letter, in the following terms:

> I will attempt to provide you with some philosophy on our use of the USDA Graduate School for training library technicians.
>
> . . . We have developed an active training program of paying for enrollment at USDA since we are insisting that

preparation for the higher grade library assistant positions involves not only on-the-job training but formal training at USDA. We have not recruited library technicians since we plan to advance our own qualified library assistants as positions become available.

While on-the-job training teaches an employee the specific skills to perform a job we hope that formal training will provide a broader perspective of librarianship and a better appreciation of the functions of the entire library.

The primary problem we have encountered as related to library technicians is that of explaining that a high school degree and even a certificate from USDA is not equivalent to a graduate degree from a library school. We insist that certain positions in the Library be filled by trained librarians. These requirements, of course, place a ceiling on the grade a library technician can expect.

. . . We have attempted to conduct a thorough analysis of the Library functions to identify those functions which require a librarian and those which can be performed by an assistant. The librarians are being assigned only professional duties.

It is our feeling that too many librarians are being used to perform nonprofessional tasks. From a staff of twenty, we have identified eight professional positions. In our opinion, the other tasks can be performed as well by library assistants and, probably, more contentedly since any professional worth his salt rebels at consistently performing nonprofessional tasks.

COMMENTARY

The combined accomplishments of the USDA Graduate School and the Ballard School programs in numbers of students served and breadth of course offerings present an unparalleled "success story" in the training of library technicians. The special needs which they serve mean that they can be contrasted but not compared with other programs. Perhaps the fundamental difference between these programs and all others surveyed is the absence of any consideration of granting a degree. The overall aims of the two institutions conform more nearly to the concept of adult education than to higher education.

The most immediate consequence of the non-degree status of the programs is that the administrators of the programs do not concern themselves to any great extent with the educational experience of the students outside of the library courses. By contrast, the two-year and four-year institutions described elsewhere in this study must develop their curricula within the framework established by regional accrediting associations for programs leading to the Associate of Arts or Associate of Applied Science degree.

The Ballard School and the USDA Graduate School programs operate on a strictly pragmatic basis to meet the present needs of the employers of their students. Since most of the students in both programs already hold full-time jobs, the classes are made up of more mature persons than is true of the community college classes. The instructors can assume that through self-education or formal training their students have already attained a post-high school educational level. While stating this it is also important to point out that both Ballard School and the USDA Graduate School are ready and able to offer students in any of their programs an enriched educational experience in the liberal arts and sciences as well.

The Ballard School catalog tends to have more listings in the liberal arts; the USDA School catalog has a great many course listings in the sciences. To put this in other terms, a student in the library program at either of these schools probably could get the educational equivalent of an Associate of Arts degree program, but there is no requirement on the part of the institutions that he must. In view of the educational achievements and maturity level of the student bodies in both cases, operating within the concepts of adult education rather than higher education seems entirely justified.

The future development of the Ballard School and the USDA Graduate School programs will be interesting to observe. Both are securely established and serving a growing demand. Available physical facilities at Ballard School are strained to the utmost in an effort to accommodate applicants for the library program. The USDA Graduate School appears to have rounded out a full complement of course offerings and has enjoyed a growing enrollment in the five years since the Certified Statement of Library Accomplishment was first offered. It would appear that a time for "taking stock" and planning for new kinds of future growth is at hand for both institutions.

Acknowledgements: The cooperation and assistance of several persons connected with the U.S. Department of Agriculture Graduate School is gratefully acknowledged. These include: Dr. John Holden, Director of the School; Mrs. Constance Coblense, Registrar; Miss Leila Moran, and Mr. John Sherrod, instructors; and Mr. Foster Mohrhardt, Director of the National Agriculture Library.

Thanks are due to Mrs. Mary John, Director of Ballard School who supplied current material and statistics. Miss Elizabeth Ferguson provided much helpful information in addition to her articles on the early development of the program. Her assistance is greatly appreciated.

LIBRARY TECHNICIAN TRAINING IN NEW YORK STATE:

ORANGE COUNTY COMMUNITY COLLEGE

Middletown, New York

Between September 1958 and June 1962 a Library Technology program was conducted at Orange County Community College in Middletown, N.Y. This program was studied intensively throughout its existence by an evaluation committee appointed by Deputy Commissioner Nyquist of the New York State Education Department. The final report of that committee* plus an article by William G. Dwyer, then president of the college, in the Library Journal**gave the discontinuance of the Orange County Community College program more publicity than most existing programs have enjoyed.

In the course of collecting data for this report visits were made to 17 institutions which have (or had) library technician programs. Other schools were contacted, and conversations were held with several dozen librarians, documentalists, and information scientists. Rarely was an individual encountered who was aware of as many as five programs, yet it seemed that a majority knew that "a program like that was tried at Orange County in New York, and it failed."*** This is the basis for the claim that the discontinued program at Orange County Community College (hereafter called OCCC) is better known than much larger programs which are thriving at present.

It is not the purpose of this report to explain, justify or critize the discontinuance of the OCCC program. The documents cited below provide an authoritative account. This disclaimer is entered simply because individuals connected with that program have indicated that its existence was attended by frequent, heated and acrimonious discussions. The entire subject of the OCCC program appears to be charged with emotions which are of no concern here; however, it would be less than candid to ignore their existence.

The story of the OCCC program is well told in Mr. Dwyer's article, and with the permission of the editors of Library Journal it is reproduced here.

* Report of the Deputy Commissioner of Education's Evaluation Committee on the Experimental Library Technician Program. New York City, N.Y. (1961). Submitted to Mr. Ewald B. Nyquist by Harold W. Tucker, Chief Librarian - Queensborough Public Library and Chairman of the Committee.

** Dwyer, William G., "End of an Experiment?", Library Journal, Vol. 87,18, October 15, 1962.

*** When the author of this report recently presented some of the data orally at the 1965 Congress of the International Federation for Documentation, the first "question" from the floor was a brief description of the failure of the Orange County program.

End of an Experiment?

"At the core of this failure," says a college president, "is the inability or unwillingness of librarians to define the difference between the professional and the nonprofessional in library management"

By WILLIAM G. DWYER

THE LIBRARY Technology Program which has been offered on an experimental basis at Orange County Community College (Middletown, N.Y.) since September 1958 was discontinued in June of this year. The two-year program was intended to equip young people for library duties on the subprofessional level and was instituted to fill the needs of students attracted to library work who, for various reasons, could not aspire to the professional library degree. It was hoped that the Technology Program would supply competent assistants for librarians and would provide an avenue for many of its graduates to continue their library education at a later date.

The originators of this course of study observed an area of library duty composed of clerical routines and technical skills which does not seem to require the special equipment of the professional librarian, but which at the same time presupposes a training the beginning library clerk even on the senior level can seldom be expected to have. This area of duty includes many of the routines of book ordering, circulation, interlibrary loan, the maintenance of the card catalogs and vertical files, much of the physical processing of books for the shelves, the repair of books, and responsibilities connected with the supervision of library housekeeping. Its province would not extend to any of the authority for policy making, but it was expected that in larger libraries it would seem appropriate and convenient to have the Library Technician supervise junior and, in some instances, senior clerks.

The College envisaged this position as one under the direct supervision of a professional librarian and as one that could not borrow from the status nor infringe upon the responsibilities of the professional librarian. A clear objective in the teaching of the course was the inculcation of an informed and intelligent appreciation of the superior training and broad educational background expected of the graduates of schools of library service and their functions as subject specialists, or as administrators and policy makers.

In public library operations in New York State the proposed Library Technician would be analogous to the Senior Library Clerk who had been carefully trained with a varied experience over several years, an employment development among library personnel which is now insufficiently rewarded. The designers of the program believed that the addition of a classification for Library Technicians to the present rating and pay plan in libraries would not only serve to fulfill the need for pretrained assistants, but would also offer incentive to Senior Library Clerks, who could progress to the new position title through a graded scale.

The College did not act unilaterally in setting up this program. In its planning stages librarians and educators from all over the state were consulted, and the New York State Library Division of Extension guided its progress. Particularly in the immediate area of the College, librarians from public, academic, and special libraries generously gave advice, and the plan of study adopted for the program was devised by Dr. Wayne Yenawine, Dean of the Library School and Director of Libraries of Syracuse University.

Plans for the course were submitted to the New York State Department of Education for approval, and Dr. Ewald B. Nyquist, Deputy Commissioner of Education, to whom the plan was referred, requested the New York Library Association to participate in an evaluation of the Program. The Personnel Administration Committee of the New York Library Association appointed a "Committee to Evaluate the Library Technician Program."

Members of this Committee were: Harold W. Tucker, Chairman, Chief Librarian, Queens Borough Public Library; Dr. Ewald B. Nyquist, Deputy Commissioner of Education; Dr. Wayne Yenawine, Director of Libraries and Dean of the School of Library Service of Syracuse University; Alan Heyneman, Personnel Director, New York Public Library; Irving A. Verschoor, Director of Library Education, State University College, Albany; Ruth Lake MacDonald, Librarian, Erie County Technical Institute; Dr. Marvin Rapp, who was at that time Associate Executive Dean of the Institutes and Community Colleges of the State University; Herbert S. White, Manager, I.B.M. Engineering Library, Kingston; Mrs. Mary Preston, President of the Board of Trustees of the Ramapo-Catskill Library System and Leonard Cohan, Librarian, Community College, Brooklyn. Mrs. Elena Horton, who as Library Director of the Orange County Community College was largely responsible for the origination of this program, and who is now Director of the Ramapo-Catskill Library System, was also a member. Mr. Robert Greenman, Dean of Orange County Community College, was retained as a consultant.

A scheme of evaluation was proposed by the Committee to consider the position and duties of the Library Technician within the

library, the job market for Library Technicians, and the course content and teaching of the Library Technology Program.

Because it was felt that many aspects of these considerations could not be resolved in the abstract, the program was set into operation on an experimental basis at the College in September 1958. The response of librarians and the library-minded public was enthusiastic, and there was much favorable publicity. The acute shortage of professionally trained librarians had served to call attention to the need for adequate support for librarians with both financial and actual assistance. The complaints of librarians themselves in professional journals concerning the necessity for delegating the clerical duties so long associated with the librarian's position were offered an answer by the Technology Program.

Opposition was also expressed. Several prominent librarians in the State and one school of library service voiced the fear that an encroachment was being planned on the professional status of the librarian and that technicians would be used to fill positions where graduate librarians might have been employed. Since the College had defined the technician as a subprofessional whose duties would be performed under the direct supervision of a professionally trained librarian, the College could not recognize the validity of these arguments.

Interested students were counseled that though the College was prepared to accept the 12 credit hours (4 semester courses) of the Program in application toward its A.A. degree, these credits were not transferable to any other college, and the job market for library technicians remained uncertain and undefined. The College stressed that no employment advantages could be expected beyond what it considered to be a more than adequate preparation for Civil Service examinations on the clerical level.

Despite these cautions, five students were sufficiently interested in library work to undertake the program in 1958. Three of these were graduated in 1960. Two students were graduated in the program in 1961, and two more in June of this year. As may be seen from these figures, students were understandably reluctant to commit themselves to a program of experimental character.

The work of the Committee to Evaluate the Library Technician Program proceeded apace. It conducted its study through interviews with librarians in all sorts of libraries, regional and state-wide conferences, and questionnaires. Pilot projects were set up in a selected group of public and special libraries in an attempt to define and analyze the need for and the potential function of Library Technicians. Findings in all areas of the inquiry were negative or admittedly inconclusive.*

It is not my purpose to present here a summary of the Report of the Committee, but in order to define fully the College's position on the discontinuance of the Program it is necessary for me to indicate the Report's conclusions, and this I will do as briefly as accuracy will permit. The Report itself is well written and organized and will repay examination by anyone who wishes to inquire more deeply into the study which prompted it.

In its administrative inquiry, the Committee discovered that no agreement could be reached among librarians as to the Library Technician's duties. Though there was unanimous consent that skilled clerical help was badly needed, the position of the Library Technician could only be defined as being somewhere between the clerical and the professional. At the urging of the Committee and the College, the New York State Civil Service Commission drafted a formal job specification, detailing the area of duty which might not properly be termed professional, but which would seem to require training superior to that of the Senior Library Clerk (the highest subprofessional category in the library now designated by New York State Civil Service). Despite this job description, the Civil Service Commission has given no recognition to the Library Technician; no examination has been set up, and in a library functioning under Civil Service regulations the Library Technician could have no status.

The lack of Civil Service authorization virtually destroys the employment potential for Library Technicians. And the Committee could not discover a dependable employment market in libraries outside the jurisdiction of Civil Service. Libraries in private colleges stated that they could employ, but that preference would be given the graduates of four-year colleges even without library training for clerical positions on the same level. Several special libraries (industrial and commercial) indicated a willingness to employ, but again no dependable pattern of employment in such libraries could be defined. In those small rural libraries where Civil Service regulations do not necessarily apply there was no opportunity for the technician to work under the direct supervision of a professional since such libraries are almost always staffed with untrained volunteer workers from the community. Neither the Committee nor the College could condone the appointment of a Library Technician as head in such libraries even though the need for persons possessing any library skills whatsoever is an urgent one in a multitude of such libraries. In public school libraries it was found that there was no disposition on the part of school boards to consider the employment of Library Technicians. (And it seems to me that this is another area of the most critical need for qualified assistants.)

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* *Report of the Committee to Evaluate the Experimental Library Technician Program.* 51 pages. Mimeographed and issued by the Chairman of the Committee, Mr. Harold W. Tucker, Chief Librarian, Queens Borough Public Library, 89–14 Parsons Blvd., Jamaica, N.Y.

The Committee's verdict

Concerning its consideration of the program of study as offered at this College, I shall quote directly from the Committee's Report:

"The *validity* of the curriculum — whether the Library Technician course could actually prepare Library Technicians — could not be tested because the question of just what a Library Technician would do was unanswered. . . The Committee could offer no clear and consistent premise, aside from the perhaps too nebulous one that the Technician's province lay somewhere below the Librarian's and above the Clerk's.

". . . The twelve hours of library technology have no recognition for advanced standing or even as the equivalent of the undergraduate library courses which are required by some graduate library schools.

"From this it is apparent that the twelve extra hours, the four library technology courses, which the prospective Library Technician is obliged to take, *are justified only to the extent they will qualify him for a position as a two-year graduate.*" (See the *Report*, pages 23-24.)

The difficulties of offering a program of an experimental nature which was designed for vocational preparation but which had no dependable employment potential were already well known to the teachers and administrators of the College at first hand. In addition to the small enrollments in the Program because of its manifest handicaps, we were also concerned with the attitude and prospects of our technology students. We discovered that no matter how we might advise them concerning the experimental nature of the program, the mere fact that such a program was offered at the College gave rise to expectations which we could not support academically (since our credits for the program could not be transferred) nor in the job market. We were also dismayed to note the tendency of parsimonious or hard-pressed boards *and librarians* to employ our graduates in positions where the services of a professional librarian were indicated. It became evident that those librarians who had already cautioned us in this regard had fewer illusions regarding the status of the profession than we.

We were deeply concerned with these problems when the Committee published a preliminary report in June 1961. Its conclusion at that time was that the Technology Program be continued at Orange County Community College subject to further study.

Faced with the dilemma created by the refusal of the New York State Civil Service Commission to establish a rating for the technician and our counseling difficulties, the College's Administrative Staff recommended to the Board of Trustees in November 1961 that the Library Technology Program be discontinued, and in the same month the Board passed a resolution officially terminating the Library Technology Program as a curriculum in June 1962. We were, therefore, not surprised when the final Report of the Committee, which came out in January of this year, reached the same conclusion.

The further recommendations of the Committee went far beyond the Library Technology Program offered at this College, and I cite them by title: That the Library Extension Division field training program, as recommended by the Commissioner's Committee and recently implemented, be strengthened and expanded. That the potential of community colleges for training be developed by the Library Extension Division field training program. That the entire classification structure of library positions be re-examined. That the State of New York take an integrated approach to librarianship by placing responsibility for certification of librarians in all types of libraries in a single state agency. That the Commissioner of Education form a broadly representative committee on library manpower.

Status fears

We do not concede the failure of the Library Technology Program at this College to be due to inherent weaknesses in the Program itself. At the core of this failure is the inability or unwillingness of librarians to define the difference between the professional and the nonprofessional in library management, and this I believe to be closely linked to the fear that the status and responsibilities of professional librarians will be infringed upon. Had librarians and schools of library service recognized this Program as a step toward the provision of capable assistants for librarians and as a possible recruitment point for future professionals and rallied to it, the power of their opinion would have been sufficient to insure for this Program what it essentially required — the addition of a Technician's rating to the Civil Service administrative pattern for libraries.

As a college president who supports full faculty status for the librarians in our own library and who hears much of the furor in library circles on such matters as the public image of librarians and the full professional recognition they desire, I am concerned that no generally accepted agreement has yet been reached on what seems to me to be a fundamental matter. I predict that as librarians progress toward the mastery of information materials and the efficient administration of these in the areas in which they function, prior training for library assistants will eventually come to be regarded as a necessity.

The title I have chosen for this report from our College is a question. Is this the end of an experiment, and if so, what is its significance for the library profession? Only librarians themselves can provide a satisfactory answer.

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Commentary

There is little that can be added here to Mr. Dwyer's account, but several of his points seem worthy of elaboration because of their contrast with other programs. The courses and curriculum at OCCC were remarkable only in that the 12 hours of library technology were added to the 60 hours required for the Associate in Arts degree, creating a program of 72 credit hours. The 60 hours made up a standard liberal arts program not unlike the two-year programs in the California community colleges.

Anyone who reads Mr. Dwyer's article and has visited a number of similar programs will be struck by his following statement: "Plans for the course were submitted to the New York State Department of Education for approval . . . " (p. 3620). In the course of this study institutions were contacted in nine states in addition to New York, the District of Columbia, and Puerto Rico. The author is not in a position to state categorically that none of the other respective State Departments of Education require prior submission of curricular plans for library technicians, but no other mention of such a requirement was encountered.

In a recent issue of Junior College Journal* Dr. Helen Earnshaw relates her experiences in starting the library technician program at Los Angeles Trade-Technical College. In her article she mentions submitting her course outlines to the Los Angeles City Board of Education for approval. There is certainly no inherent reason for educational administrators in Los Angeles to be any more receptive to curricular innovation than administrators in Albany, New York (or their counterparts in Sacramento, California). There is a difference in perspective, however, that should not be discounted.

If the Los Angeles City Board of Education had rejected Dr. Earnshaw's request or rescinded approval at a later time, the decision would have had no binding effect on other community colleges elsewhere in the state. Officials in Albany or Sacramento necessarily consider applications for new curricula in light of their possible consequences throughout the state. Such far-reaching responsibilities never rest on a local school board. While the advantage of the centralized model for such decision making is that it facilitates fairly rapid emulation of a successful program throughout the state, once it has proven itself in a single location, the countervailing disadvantage is that denial of an application for change tends to pre-empt the subject from future experimentation by other institutions. At the time of the OCCC program, in fact, the request of another community college to institute a similar program was denied pending the report of the evaluation committee.** No library technical programs were reported in New York institutions in the U. S. Office of Education's Survey of Occupational Curriculums 1963-64.

The second noticeable feature of Mr. Dwyer's article is his description of Commissioner Nyquist's appointment of a "Committee to Evaluate the Library Technician Program." Again, no such action on the part of a State Department of Education was encountered in surveying the other programs covered in this report. In her article Dr. Earnshaw is equally specific in describing the origin of her advisory group:

". . . I was advised that it was necessary to have an advisory committee made up of members whom I was to choose" (op. cit., p. 23).

Both committees were formed during the 1958-59 academic year; and the institutions represented on Dr. Earnshaw's committee closely resemble those of the OCCC committee. Listed by institutional identification, the two groups included the following members:

* Earnshaw, Helen, "Starting a Two-Year Curriculum for Library Assistants," Junior College Journal, Vol. 36, no. 2, October 1965, p. 22-23.

** The report to the Deputy Commissioner of Education op. cit., p. 4.

Orange County Community College	Los Angeles Trade-Tech College
Dean of School of Library Service of Syracuse University	Dean of Graduate Library School University of Southern California
Director of Library Education, State University College, Albany	Dean of Graduate Library School, Immaculate Heart College
Manager, IBM Engineering Library Kingston	Librarian, Rand Corporation
Personnel Director, New York City Public Library	Personnel Officer, Los Angeles City Public Library
President, Board of Trustees of Ramapo-Catskill Library System	Librarian, Beverly Hills Public Library
Personnel Technician, Department of Civil Service, State Campus, Albany	Personnel Representative, Los Angeles County Civil Service Commission

The remainder of the OCCC group is listed in Mr. Dwyer's article. Dr Earnshaw's committee also included the librarians of the Engineering Department at U.C.L.A.; The Prudential Insurance Company; Planning Research Corporation; Atomics International; and the California College of Medicine; as well as representatives of the Personnel Office of the Los Angeles County Library and the city Civil Service Department.

Of course, the institutional similarities between the two committees are secondary to the manner in which the members were appointed and the purpose which they were to serve. Dr. Earnshaw's was an advisory committee selected to assist her in the development of her new curriculum. The OCCC group was an evaluation committee charged with responsibility to advise the Deputy Commissioner of the State Department of Education. This is not to say that the OCCC group did not provide advice to Mrs. Elena Horton as she developed her courses, or that the Los Angeles Trade-Tech advisory group does not attempt to evaluate the work of Dr. Earnshaw. The significant difference is that in the case of Los Angeles Trade-Tech (and most of the California institutions studied) evaluation would not be undertaken concurrently with the initiation of the program as was true of OCCC.

The third statement made by Mr. Dwyer which will seem remarkable to anyone who has looked at two dozen library technician programs is the following: "Despite this job description, the Civil Service Commission has given no recognition to the Library Technician; no examination has been set up, and in a library functioning under Civil Service regulations the Library Technician could have no status. . . . The lack of Civil Service authorization virtually destroys the employment potential for Library Technicians" (op. cit., p. 3621).

Within the frame of reference of the OCCC Evaluation Committee the dilemma that Mr. Dwyer faced was undoubtedly real. To understand this situation some additional background material from the committee's report is necessary. The following is taken from pages 9 and 10 of the committee's final report.

> This was essential, of course, to prove whether or not the Technicism course would be economically feasible, whether there would be a sufficient number of appropriate jobs for graduates to warrant encouraging students to enter the program and thus create large enough classes to justify the cost of the instruction and administration. Identification of the need in terms of the particular types of libraries in which it might exist was essential because this would in turn indicate something of the types of duties the Technician would perform prerequisite to design and evaluation of training.
>
> There was a dissenting approach, forwarded by the College and some members of the Committee, which held that - with the counsel of expert librarians - a course could be designed which would equip students with useful, basic skills. Once these young people were available - in the market - a place would be made for them in libraries.* Most of the library administrators on the Committee rejected this approach as failing to take into account the practical, administrative limitations of library operations, at least in the libraries which are parts of, or regulated by, large organizations or any segment of government. The Committee, therefore, proceeded on the hypothesis that the existence of the jobs should be established before attempting to prepare people for them. [italics added]

Proceeding on this hypothesis meant, in this case, using questionaires, interviews, and conferences with librarians to try to get statements of the availability of jobs for technicians. In the words of Mr. Dwyer, "Findings in all areas of the inquiry were negative or admittedly inconclusive." But one further piece of information is needed to set the stage for the insoluble dilemma suggested earlier by Mr. Dwyer. In the early part of its report to Commissioner Nyquist the committee reminded him that the proposal to establish library technician training ". . . tends to re-establish a subprofessional category that was purposely eliminated in 1950 from the New York State Library personnel pattern by joint action of the Civil Service Commission, Education Department and the New York Library Association. While reconsideration of the earlier decision in favor of a clearly distinct professional group on the one hand and a clerical group on the other may be in order at any time, re-establishment** of a sub-professional group would equally require the most thorough examination and sound justification." (p. 5)

* Author's note: While I do not wish to take sides in what is now an argument of the past, it is difficult to refrain from observing (with the admitted advantage of perfect hindsight) that the criticism in the dissenting view provides a reasonable description of what has actually happened in almost every successful program extant. That is, virtually nowhere was the need for library technicians clearly articulated beforehand and a curriculum carefully created to fill that need. - J.M.

**The report, as submitted, does not elucidate further on the situation as it existed prior to 1950, so the outside reader is unable to judge the extent to which the new technician program does constitute re-establishment of an old employment status.

The events leading to the dilemma stated by Mr. Dwyer seem to have occurred in the following sequence:

1. The State Civil Service Commission in 1950 established a bi-polar model for distribution of library personnel by clearly separating clerical and professional workers.

2. The personnel arrangement was in effect for almost a decade preceding the appointment of the Deputy Commissioner's Evaluation Committee.

3. The Committee felt it could not recommend the curriculum unless there was economic justification in terms of appropriate jobs currently available to graduates of the program.

4. Inquiries were made among libraries, many of which operated within the bi-polar model of personnel structure, and replies were inconclusive.

5. The Civil Service Commission did not write examinations or otherwise recognize the status of Library Technicians.

This sequence can be summarized in syllogistic form, as follows:

I. ". . . the existence of the jobs should be established before attempting to prepare people for them." (Committee Report, p. 10)

II. The statement of manpower demand must, ". . . take into account the . . . administrative limitations of . . . libraries which are . . . regulated by . . . any segment of government." (Committee Report, p. 10)

III. ". . . in a library functioning under Civil Service regulations the Library Technician could have no status." (Dwyer, p. 3621)

Conclusions: "The essential . . . [conclusion] is that there is no place for the proposed Library Technician training program. This . . . is inescapable in . . . the absence of any established need for the Technician class . . . and the fact that there is no economic justification for the course." (Committee Report, p. 25)

In the words of Chairman Harold Tucker in the letter of transmittal which accompanied the report to Deputy Commissioner Nyquist, "The conclusions recorded in the Report are the only ones that can logically be deduced." On logical grounds there is certainly little basis for disputing Mr. Tucker's statement (though some might contend a certain circularity of reasoning is involved). On empirical grounds, however, individuals might question or even reject one or more of the underlying premises. That is to say, the acceptance of premises I, II, and III do appear to lead inexorably to the dilemma stated by Mr. Dwyer.

It is not the purpose of the remarks here to criticize the premises which the Evaluation Committee accepted, to offer alternatives, or in any way to "rehash" debates which were concluded four years ago. The record speaks for itself. The point of departure in this case was a set of three remarks in Mr. Dwyer's article singled out merely to illustrate the special New York features of the problems the OCCC group encountered. No claim is made here that the OCCC experience could have happened only in New York State. There are other states where curricular innovation in junior colleges involves decision making on a statewide basis. It appears, however, that in New York lower levels of education, junior colleges, and the state university system are unified more than elsewhere. This is reflected in the role of the Regents in New York State, which appears unparalled in American education.

The data in this study can only tentatively suggest that if the Orange County Community College experience was a "failure," it was a New York failure as much as a failure of library technician training. In short, the experience may provide not so much a pedagogical lesson as a lesson in the adainistrative problems of state governments and inter-relationships among public and professional organizations.

CHAPTER IV

SHORT REPORTS

(See Table of Contents for list of schools in this chapter)

CITY COLLEGE OF SAN FRANCISCO

Ocean Avenue at Phelan

San Francisco 12, California

Katharine G. Pedley,

Librarian

The City College of San Francisco is a public two-year college accredited by the Western Association of Schools and Colleges. It was established in 1935 and is among the larger community colleges of California. The Library Technology program was begun in the fall of 1964 after a year of planning. Nine students enrolled in the first class. Sixteen additional students were added in the second semester, and 32 registered for the beginning course in the fall of 1965. The program appears to be growing rapidly, which is in keeping with the school's overall increase in enrollment.

The curriculum was developed by the College in cooperation with members of the professional staffs of: the University of California Graduate School of Librarianship at Berkeley; the San Francisco Public Library; the Special Libraries Association of California; the Department of Texts and Libraries of the San Francisco public schools; and the Bureau of Audio-Visual and School Library Education of the California State Department of Education. The faculty consists of members of the regular College staff, including professional librarians, and visiting librarians from public and special libraries.

The curriculum emphasizes liberal arts in its course requirements outside of Library Technology. The sequence of courses leading to an Associate of Arts degree is as follows:

First Semester	Units
*Business 61	2
**Business 80A	2
Communication G5A or English 1A	3
Humanities G11A or 1A	3
Library Technology 51	3
Physical education	1/2
Personal health	2
	15 1/2

Third Semester	Units
Business 83	2
History 4A	3
Library Technology 61A	3
Life Science G11	4
Physical education	1/2
Psychology G6	3
	15 1/2

Second Semester	Units
Communication G5B or English 1B	3
Humanities G11B or 41B	3
Library Technology 55	3
Physical education	1/2
Electives	6
	15 1/2

Fourth Semester	Units
Library Technology 61B	3
Physical Science G11	4
Physical education	1/2
Political Science 56	3
Electives	5 or 6
	15 1/2 or 16 1/2

*Students who have passed the entrance examination in mathematics take an elective in lieu of Business 61.

**Students who satisfy the requirement for Business 80A by passing an examination in typing take an elective in lieu of Business 80A.

The library Technology courses are described in the college catalog as follows:

LT 51. Introduction to Libraries and Library Materials (3)
An introduction to libraries and their use: their types, functions, and organization; basic library tools, including catalogues, indexes, and reference works.

LT 55. Library Technical Processes (3)
Introduction to library service: circulation procedures; handling of magazines; library filing; arrangement of books; shelving and shelf reading; care and processing of books, pamphlets, and periodicals.

LT 61A-61B. Advanced Library Practice (3-3)
A comprehensive course in library services: ordering, acquisition, classification, and cataloguing of books and other materials; handling of audio-visual materials; use of library equipment and machines; mending and binding.

As in a number of other new programs, the development of much of the course material became an added responsibility of the City College of San Francisco (CCSF) librarian, Mrs. Katherine Pedley. While this added to Mrs. Pedley's workload, the college was fortunate in that she had taught library courses at nearby University of San Francisco. The problems of developing a curriculum and course materials are no less real at a large institution than at smaller colleges; however, since a two-year institution with a professional library staff of five persons (such as CC of SF) obviously has different resources than does a school with a single professional librarian, it is likely to arrive at different solutions to these problems.

It is not possible to reproduce here the many pages of course materials which have been developed for the Library Technology courses at City College of San Francisco. A few sample questions, though, will provide a suggestion of the exercises in library problems that the students are required to perform. Here are only three examples, selected from many:

1. Jonathan Wild was British.
   a. What was his main occupation?
   b. What is the title of the ballad Jonathan Swift wrote about him?
   c. How did he die?
   d. Which is the most trustworthy account of his life?
   e. What work should one consult for caricatures of him?
   f. Who is the author of the biographical sketch?

2. Professor Smart has recently taken up puppetry as a hobby and in the course of a few evenings he has produced a puppet that looks remarkably like the late George Bernard Shaw. Now the professor would like to produce a play in which the great GBS is one of the characters. The professor is pretty much convinced that he will have to write the play himself. However, should such a play already exist, he would like to know:
   1. The name of the author of the play.
   2. The title of the play.
   3. The subject of the play.
   4. The number of additional puppets he will need to produce it.
   5. Whether there is a copy in the Gleeson library.

3. A student is preparing a preliminary bibliography on the world-famous Spanish playwright Jacinto de Benavente--who died in 1954. The student has to have both critical and biographical material, from books and from periodicals. However, he has been instructed to limit himself to materials available in our library. Outline briefly for him the procedure he should follow and the tools he should use. Do not send him to the wrong tools!

The author did not have an opportunity to examine course materials from all the schools surveyed; however, in volume and in attention to important detail the classroom materials in use at City College of San Francisco were impressive.

COLLEGE OF THE SISKIYOUS

Weed, California

Librarian - James Simmons

College of the Siskiyous accepted its first students in the fall of 1959. Its present enrollment is approximately 425, and it serves students from a mountain and ranching area of northern California adjacent to the Oregon state line. It is a publicly supported institution accredited by the Western Association of Schools and Colleges.

Library training at College of the Siskiyous does not constitute a full major in an Associate of Arts degree program. In this sense it is more nearly comparable to a one-year certificate program, like the one at Palomar College. It has not been established as long as the Palomar program, however, and does not grant a certificate. It has all the problems of a small school with only a single professional librarian who must divide his time between instructional and administrative responsibilities. In that sense it is comparable to the program at Gavilan College.

Even though the program does not actually prepare library technicians, it is described here, as the Gavilan program was, to indicate what a very small college in an isolated area is able to accomplish. The college catalog lists the courses as follows:

LIBRARY SCIENCE

LIB. 1A-1B Librarianship (1-2) I or II

Three or five laboratory hours each week.

Prerequisite: Consent of instructor.

Participation in operating the library. General principles of library science and procedure. Experience in cataloging and classification. Vocational exposure to librarianship as a profession.

LIB. 2A-2B Advanced Librarianship (1-2) I or II

Three or five lecture-laboratory hours each week.

Prerequisite: Lib. 1B.

Periodical indexes, basic reference works. Advanced work in filing, card catalog, and bibliography. A general education course designed to increase efficiency in all other fields as well as to give a prevocational overview for potential library majors.

To some extent these courses represent tutorial, practice, or apprenticeship courses. The students may register for 1 or 2 units of credit each semester and spend either 3 or 5 hours per week in the library under Mr. Simmons' supervision. Almost all the students register for 2 units. In 1959 one student registered; and in the following year, five. Since 1961 the enrollment has been in the 15 to 20 range. In the spring of 1965 there were 3 students in their second year and 16 in their first.

Several of the students interviewed at the school indicated a desire to transfer at the end of two years to a university or state college and continue through professional training. For them, obviously, the program was a transfer program which offered the opportunity to gain library experience rather than a terminal program. It should not be thought that only work experience in a college library is offered in these courses. The students' experiences are planned and guided quite deliberately. This is particularly true in the areas of bibliography and cataloging and classification.

One recent student is employed part-time in a local high school library; another, on a part-time basis in a local elementary school library. A student who married and left California is now employed full-time in the public library in Kansas City, Missouri. An interview was conducted with the former student who is employed in the local elementary school. The school is located north of Weed in the town of Montague, California. Montague has a population of about 1,000, and with children brought into school from surrounding ranches, it has an elementary school with almost 850 children in Kindergarten through 8th grade.

Mrs. S., the former student, is married to a serviceman attached to a nearby base, and this is how she happened to be living in the community. Lacking a B.A. degree, she naturally has no credentials as an elementary teacher. The school principal is able to employ Mrs. S. part-time as a teacher's aide and is delighted to do so. The school has previously never had a librarian. In the entire County library system there is no professional librarian. No one in the school, least of all Mrs. S., believes that the school children are getting the equivalent of professional library service. But the improvement over the former situation is described as outstanding by the teachers and the principal.

A small but significant change is represented by the fact that the school is served much more extensively now by the bookmobile from the County Library, simply because someone is in the library regularly to receive and return book shipments. The fear often voiced by professional librarians

that such subprofessionals will be used by school administrators instead of higher-salaried professionals is certainly offset in this particular case by Mrs. S.'s desire for further training. Helping children and teachers on a day-to-day basis has given Mrs. S. some very clear insights about her own shortcomings. Since College of the Siskiyous does not offer any training in children's literature, Mrs. S. indicated that she planned to attend Southern Oregon State College to take further work in this field during the 1965 summer session. Ultimately, she would like to become a professional librarian, but at the present it seems fair to say that she is functioning as a competent (and enthusiastic) library technician.

By way of contrast, since the interviewer was personally acquainted with the school library situation in Washington, D.C., he discussed the subject with the principal of the Montague School. Up until 1964 none of the public elementary schools in the District of Columbia was served by a school librarian. At present the majority of them are still not. It is true that College of the Siskiyous is far from having the strongest library training program of the California community colleges. Whatever its limitations, however, it seemed to the interviewer that the existence of the program had made it possible for school children in California's rural ranch country to enjoy better school library service than do most children in the nation's capital. The principal and the interviewer agreed that this is not an argument for substitution of subprofessionals for professionals. The Montague situation suggests, though, some of the immediate benefits which can be expected from library technician programs.

FULLERTON JUNIOR COLLEGE

321 East Chapman Avenue

Fullerton, California 92632

Lois Carter McClure,

Head Librarian

Fullerton Junior College, located in the City of Fullerton, Orange County, California, is an integral part of both the public school and higher education systems of California. It is officially accredited by the Western Association of Schools and Colleges.

The need in Orange County for better-trained library clerks was apparent for some time, and the Library Clerk training program initiated in 1964-65 had been requested by librarians in the county. It has the support of the Orange County Library Association, which includes more than 200 members, representing 70 libraries.

The objectives of the Library Clerk training program are (1) to provide a background of general education coupled with certain basic library skills to prepare interested students to enter library work above the minimum clerk status; (2) to introduce the varieties of library work into which a trained person may enter, suiting abilities to the particular job; (3) to provide training in skills at an undergraduate level making possible entry into library work, without involving the long "in-service" training now needed for clerks; (4) to encourage those with high talent to continue into the graduate level of library science; and (5) to provide extended training in library techniques for the person who already has either the AA or the BA, who would be eligible for supervisory subprofessional work with this specialized training.

In the curriculum leading to an Associate in Arts degree five Library Science courses are included in the Library Clerk training program. Library Science 53 is an introduction to libraries and library services, with emphasis on the use of library resources and opportunities in the field. Library Science 55 is a practical survey of the clerical tasks connected with ordering and cataloging books. It acquaints the clerk with the use of the complicated tools needed for finding imprints and less readily available publications, and the routines necessary for the smooth performance of all areas in the acquisition and organization of library material. Library Science 57 provides practice in all problems connected with the loaning of books, their return and care; contacts with borrowers; and related library services. Its aim is to give the student both understanding and practice in all circulation procedures that involve books and people. Library Science 59 is planned to develop extended skills in specific areas of interest and aptitudes, with practice and supervision outside the college library. Library Science 60 is an elective course for those who wish to work with children. It acquaints the student with books for children, the philosophy of selection for children; introduces classical literature, authors, and illustrators; and teaches the planning and administration of reading programs and story hours.

A Library Clerk training advisory committee, composed of representatives from Orange County's spectrum of library systems, counsels with the Library faculty at Fullerton in the development of curriculum needs and assists the librarian in the placement of Library Science 59 students into the cadet work-experience appointments. The committee makes recommendations based on community needs in order that students who plan to enter the library field will be better trained and more qualified for the jobs they seek.

The overall curriculum for the Associate in Arts degree is as follows:

LIBRARY CLERK TRAINING

Prepares men or women for employment as a library clerk in public, school, and special libraries.

First Year	Units 1st S.	Units 2nd S.
Physical Education	1/2	1/2
1AB Reading and Comp.	3	3
35 Personal Health	2	
53 Library Science	3	
55 Library Science		3
*3AB Typing	3	3
3 Applied Psychology	3	
27 U.S. History	3	
Electives		6
	17 1/2	15 1/2

Second Year	Units 1st S.	Units 2nd S.
Physical Education	1/2	1/2
5 Amer. Govt. Survey	2	
57 Library Science	3	
59 Library Science		3-4
**60 Library Science	2	
Electives	8	12
	15 1/2	15 1/2-16 1/2

*Elective may be substituted for typing if speed exceeds 45 words per minute.

**Elective for work with children.
Recommended electives: 30AB Intro to American Lit., 34 Readings in the Novel, 1A Survey of Art History, 1A Sociology, 1 General Biology, 1 Physical Geography, 1A Prin. of Economics, 4A Western Civilization, 39 California History, 1 Physical Geology, 1 or 2 Anthropology, 6A Philosophy, 1 Survey of Data Proc.

Commentary

Fullerton Junior College is the oldest and one of the largest junior colleges in California and offers more than 700 separate courses in its instructional program. While the needs of public and school libraries in Orange County have been a primary consideration in the design of its library training program, the richness of course offerings in other fields suggests many possibilities for specialty options. Fullerton Junior College has a very strong program preparing techicians for employment in the data processing field. Since the use of electronic data processing equipment is growing in the library field, there will be an increasing need for library technicians with some background in data processing. Fullerton Junior College is in an excellent position to offer library technical training with a data processing option, and the possibility of such a collaborative effort between the respective departments has reached the discussion stage.

At the present time courses in data processing are not part of the library technician training in any of the schools visited or contacted in this study.

GAVILAN COLLEGE

Hollister, California

Sheldon Van Duzer,

Head Librarian

Gavilan College is a California public junior college serving the residents of southern Santa Clara and San Benito counties. It is accredited by the Western Association of Schools and Colleges. At the present time Library Technician training is in a pilot project stage. In the words of the college president, Dr. Ralph Schroder, ". . . we are attempting to establish the ground rules for a more ambitious undertaking when we move to our new facilities in 1967." At that time the college's new campus in Gilroy, California, will be ready for occupancy.

The present Library Technician program was initiated in the fall of 1964 by the college librarian, Mr. Sheldon Van Duzer. Mr. Van Duzer had previous experience as a school librarian working with PTA volunteers who needed library training. This experience led him to believe that the duties of such parent volunteers would be better accomplished by technicians trained in a community college. Programs for the training of teachers' aides in commercial and recreation areas had already been instituted at the college and served as a precedent. Twelve students enrolled in the first class in the fall of 1964.

Course outlines of the four courses presently offered are reproduced below.

L.S. 51 - LIBRARY PROCEDURES - 2 units
2 hours lecture, 3 hours laboratory

Catalog Description:
A non-transfer course for vocational teacher aid students and library technicians to familiarize them with the library facilities and its procedures.

Expanded Description:
The course covers mainly circulation, library housekeeping, care of periodicals and realia.
Classroom lecture and practical experience in the following:

I. Circulation Activities
   A. Charging materials
   B. Slipping books
   C. Verifying and shelving materials
   D. Reading shelves
   E. Sending daily overdues
   F. Sending second notices
   G. Clipping
   H. Mending
   I. Reporting circulation record
II. Housekeeping Duties
   A. General - room arrangement
   B. Checking attendance
   C. Preparing posters, bulletin boards, and arranging displays
   D. Inventory recording
III. Periodicals and Realia
   A. Ordering and checking
   B. Preparation
   C. Circulation

Required Textbooks:
Wofford, The School Librarian at Work

Chief References Used:
A.L.A., Glossary of Terms
Douglas, The Teacher Librarian's Handbook

L.S. 52 - LIBRARY CLERICAL DUTIES - 2 units
2 hours lecture, 3 hours laboratory

Catalog Description:
A non-transfer course for vocational teacher aid students and library technicians in order to achieve proficiency in the clerical duties involved in library procedures.

Expanded Description:
The following areas are to be covered by this course:

I. Acquisition and Preparation of Materials
   A. Consideration file
   B. Order cards
   C. Book orders
   D. Catalog cards
   E. Pamphlets
   F. Government publications
   G. Audio-Visual materials
II. Preparation of Materials for Use
   A. Jackets
   B. Collation
   C. Book preparation
   D. Periodical preparation
III. Keeping Material in Good Condition
   A. Mending
   B. Binding

Required Textbooks:
Fargo, The Library in the School

Chief References Used:
A.L.A., Glossary of Terms
Douglas, The Teacher Librarian's Handbook
Wofford, The School Librarian at Work

L.S. 53 - CATALOGING AND CLASSIFICATION - 2 units
2 hours lecture, 3 hours laboratory

Catalog Description:
Survey of methods and principles of organizing library collections.

Expanded Description:
Typing and filing catalog cards with emphasis on accuracy in both areas.

I. The Card Catalog
II. The Main Entry
III. Card Forms for Special Types of Library Materials
IV. Related Procedures
   A. Filing rules
   B. Assigned subject reading

Required Textbooks:
Hopkinson, The Descriptive Cataloging of Library Materials

Chief References Used:
A.L.A., Cataloging Rules for Author and Title Entries
Cutter, C.A. Cutter's Three-Figure Alphabetic Order Tables
Dewey Decimal Classification, 16th edition

Prerequisites to be Enforced:

I. Library Procedures
II. Library Clerical Duties
   A. Typing proficiency

L.S. 54 - LIBRARY REFERENCE - 2 units
2 hours lecture, 3 hours laboratory

Catalog Description:
A study of basic reference materials and trade bibliography. Lecture, discussions, and reports on assigned problems.

Expanded Description:
The course covers the six basic function of reference service.

I. Types of Reference Service
   A. Dictionaries
   B. Encyclopedias
   C. Year books
   D. Biographical dictionaries
   E. Directories of agencies
   F. Handbooks
   G. Manuals
   H. Serials
   I. Indexes
   J. Bibliographies
   K. Government publications
   L. Audio visual sources
II. Reference Sources in Special Subjects
   A. Subject approach
   B. History
   C. Social science
   D. Science
   E. Humanities

Required Textbook:
Shores, Basic Reference Sources

Chief References Used:
Trade Journals
Reference Section of Library

Commentary

The Gavilan program is a good example of a small college making a modest experimental start toward the development of a full library technician program. At the prosent time Mr. Van Duzer is the only professional librarian on the staff, so his time is necessarily divided between library administration duties and the development of his curriculum. This is not uncommon among the smaller colleges which are attempting to initiate library technician programs. The Gavilan experience demonstrates how even a small college library with modest resources can offer students special kinds of library experience when the administration and faculty attack the problem with sufficient energy and imagination.

A small but significant example is provided by the circulation system in the college library, which was devised by Mr. Van Duzer and is operated by the students. Using an adding machine as a "numerical typewriter," each loan transaction is recorded on the adding machine tape. A borrower brings his book from the open stacks to the circulation desk and displays it to the circulation clerk along with his student identification card. The clerk records the book's call number (a Dewey Decimal system is in use), the book's acquisition number, and the student's identification number. The adding machine tape is advanced, torn off, and the student signs the tape segment. This has the advantage of creating a transaction record without anything being removed or replaced in the book. (If the student wants a reminder of the due date he may pick up a pre-stamped card from a stack on the desk and place it in the book himself.)

Later in the day the transaction slips are taken to the college accounting office, which possesses an IBM Card Puncher. From a master deck of IBM cards for the entire collection (created at the time of book acquisition) the cards for each book loaned that day are withdrawn. These cards are given to the keypuncher along with the adding machine slips. Each IBM master card is duplicated (automatically by the machine), and at the time of duplication the keypuncher merely adds the student's identification number to the duplicated card. In this manner a transaction record is created in punched-card form which renders all library circulation records susceptible to electronic data processing. It should be noted that this is done after regular hours, thus increasing the productivity of the college's capital equipment; and a minimal amount of time is required of the student at the time of the loan transaction.

In the experience of the author (and of a number of librarians to whom this story has been related) Mr. Van Duzer's use of an adding machine as a "numerical typewriter" for circulation records is unique. The students who use and learn to understand such a system are gaining a unique experience in the rationalization of circulation procedures.

PALOMAR COLLEGE

San Marcos, California

Esther W. Nesbin,

Director of Library Services

It was not possible to visit Palomar College during the field trips conducted as part of this study. Mrs. Esther Nesbin, Director of Library Services, very kindly took the time to write a brief history of the program at Palomar College, and this was combined with material from the college catalog to produce the following report.

Palomar College, located about 40 miles north of San Diego, is a two-year public junior college of the state of California, officially accredited by the Western College Association. The certificate program in Library Science at the College, inaugurated in 1964-65, arose from the need for trained clerical assistants in the libraries of the area and from the desire to present trained students with a formal certificate of proficiency.

The College has been training library clerical assistants since 1949. Library Science 1 (Use of Books and Libraries) and Library Science 2A-2B (Library Routines) have been offered as electives in the Associate in Arts program or as terminal courses in the Adult Education program. In addition to the courses in the Library Science Department, students have also been trained in the library in Business 51 (Work Experience on Campus). During the summer of 1964 and the academic year of 1964-65, seventy students completed courses in Library Science.

Objectives of the Certificate program in Library Science are as follows: (1) to provide basic library skills to permit the student to enter library work as a trained clerical assistant; (2) to provide general office practice to permit the student to be efficient in the general office work he will do as a clerical assistant; (3) to provide an introduction to the various fields of library work that the trained clerical assistant may enter; (4) to inspire students who have the desire to continue their education at the graduate level in library work as a profession; (5) to provide training in library work for the student who has an AA or BA degree and wishes to enter the library field but is unable to go to a four-year school at the graduate level; and (6) to provide an opportunity for adults to retrain for an occupational field.

Courses in Business are included so that the library clerical assistant will be trained in general office procedure as well as the work in Library Science. Beginning typewriting, business writing, general office procedures, and filing and records management are therefore included in the curriculum. A background in literature, believed to be of value to anyone working in a library, is provided by the inclusion in the program of English 1B (An Introduction to Literature) and English [illegible] (American Writers: A Survey).

Library Science 1 includes instruction in the use of indexes, guides, bibliographies, and other reference material to familiarize the student with the use of books and libraries and to acquaint him with modern library methods. The course presents an opportunity for students to discover aptitudes in library work for choosing a life career and provides training in library work for positions in local libraries. Library Science 2A-2B provides supervised instruction in library routines of mechanical preparation, shelving, and circulation of books, periodicals, and pamphlets; introduces the student to the procedures in running a college library; teaches him use of the library to aid him in later research in upper-division work; and trains clerical workers for positions in local libraries. During the first semester students spend four weeks at each of the following stations: main desk, periodical desk, work room. A four-week period also is spent shelving books and periodicals. During the second semester students spend four-week periods in the order department and in the catalog department, as well as in studying pamphlet headings, audio-visual materials, interlibrary loan, and filing in the catalog. An examination is given at the close of each four-week period during the year.

Students who have completed the classes in Library Science have found positions in practically all of the libraries in the local area, including city, county, and junior high school libraries and the U.S. Marine Corps Camp Pendleton library. Palomar College Library has given preference to students who have completed the Certificate Program, and in 1965 eight of the nine clerical assistants had been trained at Palomar.

Seventeen students entered the Certificate program in Library Science in 1964-65, and three additional students entered at the beginning of the 1965 academic year. While the curri-

culum can be completed in one year, most students take two years to complete because they take additional courses in other areas. There is an Advisory Committee to the program, which includes librarians from two city libraries, the administrative librarian at Camp Pendleton, and the librarian of technical services at the John J. Hopkins Laboratory of General Atomics, Division of General Dynamics, San Diego, California.

Enthusiastic reception of the Certificate in Library Science program by the students and the successful placement of students who have completed their training indicate that the program fills a need in the community. Yearly growth of the Certificate program is anticipated.

Commentary

The Palomar program illustrates several features of interest in any overview of library technician training. Probably the first feature to notice is the fact that this is a Certificate program rather than an Associate of Arts degree program. While many students who take the library courses also obtain an A.A. degree, they do not do so with a major in library science. A certificate program in a California community college ordinarily does not require two full academic years to complete. At Palomar College there are other certificate programs in such fields as: Machine Transcription, Photo-Journalism, Technical Illustration, Technical Stenography, Fire Science, Real Estate and others.

As a certificate program the Palomar program would not be expected to offer as many library courses as a terminal-technical program leading to an Associate of Arts Degree. Since the greater part of the 17 credit hours required for the library certificate are in business courses, graduates of the program are properly designated as library clerical assistants rather than library technicians.

Another feature of the Palomar program is the fact that it has been well established for a number of years. It began in 1949. A frequent characteristic of the earliest programs for library subprofessionals is their emphasis on clerical or secretarial skills. This is true of the Mt. San Antonio College and Ferris State College programs as well. Programs developed later tend to emphasize purely library skills to a greater degree. This can be explained by the fact that those schools willing to pioneer in this field as early as 1949 necessarily approached a job market characterized by greater uncertainties than the job market of the mid-sixties. If their graduates did not succeed in finding library positions, it would be important for them to have other job skills. The Palomar program appears to conform to this pattern.

A characteristic of many library technician programs and virtually all of the early ones is their dependence on their own ability to produce course materials. While the time may be approaching when a sufficient number of library courses are being offered at schools throughout the country to induce educational publishers to enter the field, that situation has certainly not existed at any time in the past decade. Not surprisingly then, the students at Palomar College use laboratory manuals prepared by their instructor. These are thorough and well-designed manuals for students taking Library Science 1 and Library Science 2A-2B.

While course offerings in the Palomar program are not as extensive as some of the other programs, the continued growth of the program over a considerable period of time, during which it has supplied employees for a significant number of libraries, indicates the soundness of its effort.

PASADENA CITY COLLEGE

1570 East Colorado Boulevard

Pasadena, California 91106

William K. Grainger,

Head Librarian

Pasadena City College, a public two-year community college, is accredited by the Western Association of Schools and Colleges. The Library Clerk curriculum of Pasadena City College is a two-year program that meets the requirements for the Associate in Arts degree and prepares students for immediate employment after graduation. Students seeking employment in industrial and research libraries are able to choose electives and required course options that concentrate on the specialty of the library of their choice.

Four courses in Library Service are included in the Library Clerk curriculum. Library Fundamentals (E1) is a study of the fundamentals of library organization; library tools, techniques and terminology; classification systems; use of the card catalog and basic reference books. The course is for all students who wish to develop proficiency in the use of libraries. Library Services (E2) includes the occupational qualifications for library clerks and a study of the routines used in running a library: circulation systems, registration of borrowers, overdue book routines, shelving, book repair, and the use and maintenance of audio-visual equipment. Ordering Processes (E3) provides training in acquisition procedures, book preparation, pamphlet processing, handling of state textbooks, and the preparation of displays and exhibits. Cataloging Techniques (E4) provides practice in typing catalog cards from master copy, cataloging simple fiction, indexing of documents and technical reports, and the supervision of subordinates. Field trips are made to selected libraries and to a commercial bindery during the two-year program; and students gain practical experience by working in the Pasadena City College Library.

As each student progresses through his practical library training, each phase of his laboratory work is evaluated, in writing, by each of his supervisors. Below is a sample page from the detailed check list of duties used in practice work at Pasadena City College.

Name: _____ Initials of Instructors*

Course: _____

Semester: _____ 1. 2. 3. 4. (Numbers are explained below)

Main Desk				
Charging out books and inspecting	—	—	—	—
Discharging books	—	—	—	—
Filing book checks	—	—	—	—
Overdues	—	—	—	—
Questions to answer and not to answer	—	—	—	—
Answering telephone	—	—	—	—
Requests	—	—	—	—
Student assistants' manual	—	—	—	—
Keeping supplies on hand, pads inked, etc.	—	—	—	—
Student payroll	—	—	—	—
Special collections	—	—	—	—
Reserve Desk & Registration Desk				
Registration Desk:				
Issuing new cards	—	—	—	—
Renewing cards	—	—	—	—
Lost cards	—	—	—	—
Reserve Book Desk:				
Charging out reserve books	—	—	—	—
Discharging reserve books	—	—	—	—
Shelving reserve books	—	—	—	—
Putting books on reserve	—	—	—	—

1. Explanation by instructor.
2. Performance by student.
3. Review by teacher and student
4. Proficiency of student

* The instructors' initials in each column and row indicate when the student has completed each task and been rated.

Employment opportunities for graduates of the Library Clerk training program appear very good because of the large number of libraries in the San Gabriel Valley. In addition to the many city and county libraries, there are school and college libraries, as well as numerous industrial and special libraries. The Pasadena City College Placement Bureau Assists students in securing positions.

A greater effort is made to acquaint prospective students with the program at Pasadena City College than is the case at most other schools. In addition to an attractive printed brochure, notices are sent to high school counselors to provide them with background information. That notice is reproduced below.

To High School Counselors:

As you counsel students who may be interested in the Library Clerk Curriculum at Pasadena City College, you may find it helpful to have the following outline regarding the nature of clerical service in libraries.

Library Clerks perform various tasks in many different settings and with varying groups of people:

I. Direct public service:

- A. Issue library cards and maintain necessary registration records.
- B. Circulate and receive library materials.
- C. Answer directional questions.
- D. Direct reference and policy questions to the librarian.
- E. Check catalog for library holdings.
- F. Take reserves.
- G. Collect fines and fees.

II. Indirect public service:

- A. Check, search, and supervise processing of bibliographic information.
- B. Set up and close circulation desk.
- C. Maintain desk supplies and equipment.
- D. Process overdue and fine due records.
- E. Assist with bulletin boards and displays.
- F. Observe and set aside library materials needed for repair
- G. Shelve and read shelves when assigned.
- H. Type reports, requests, records, lists, etc.
- I. File catalog cards, shelf lists, etc.
- J. Prepare library materials for circulation.
- K. Process bindery, mendery withdrawals.
- L. Pack and unpack library deliveries.
- M. Distribute mail.
- N. Record and report statistics.
- O. Assist with inventory and book count.
- P. Keep staff and public areas neat and orderly

III. Book Collection and Other Materials:

- A. Make bibliographic search for new orders, replacements, gifts, pamphlets, pictures and serials.
- B. Revise order cards.
- C. Supervise maintenance of outstanding order file.
- D. Process new books.
- E. File catalog cards and shelflist.
- F. Sort mends, binds, and withdrawals and supply bibliographic information.
- G. Prepare information cards as directed.

IV. Public Relations:

- A. Interpret library rules and policy on registration and circulation.
- B. Handle correspondence as assigned.
- C. Handle special circulation problems as assigned.

Library Clerks work in many kinds of libraries:

I. School and college libraries, aiding in the process of formal education.

II. University and research libraries, preserving recorded knowledge and assisting efforts to extend knowledge.

III. Special libraries and documentation centers, serving the information and communication needs of business, industry, government, and special-interest groups.

IV. Municipal public libraries, providing information, popular education, and wholesome recreation for children and adults.

V. County, regional and state libraries bringing books and service to small-town and rural populations.

Because of the large number of libraries in the San Gabriel Valley, employment opportunities appear to be good. In addition to the many city and county libraries, there are numerous industrial and special libraries. Library clerks receive a monthly salary ranging from $300 to $400 per month. In large library sy tems there is a wider range, and graduates of a library clerk program may be started at a higher level of pay than those who are untrained.

The human and cultural satisfactions in library work are substantial, and the opportunities for constructive service occur constantly. Definite opportunities for advancement exist in supervisory clerical positions, and there are opportunities for creative and productive work by people of widely varying personalities and interest.

For information regarding the two-year Library Clerk curriculum at Pasadena City College, refer to the college catalog. For further information contact:

The College Librarian
Pasadena City College
1570 East Colorado Blvd.
Pasadena, California 91106

The curriculum is modeled to a great extent on the Mt. San Antonio College program and, like that one, is called a curriculum for "Library Clerks." There is a heavy emphasis on business and clerical skills in addition to the library courses. The overall requirements for the Associate of Arts degree include the following:

Freshman Year	Semester I	Semester II
Physical Education Activity Elective	1/2	1/2
Basic Communication	1	--
Health Education	--	2
Business English or)		
Reading and Composition)	3	--
*Speech	--	3
Library Fundamentals	3	--
Library Services	--	3
Business Mathematics	3	--
Typewriting	2	2
Social Science	--	3
Lettering	1	--
Electives	3	3
	16 1/2	16 1/2

Sophomore	Semester I	Semester II
Physical Education Activity Elective	1/2	1/2
American Institutions	3	--
Personal Development	--	2
Science	--	3
Ordering Processes	3	--
Cataloging Techniques	--	3
Bookeeping	3	--
Clerical Procedures	3	--
Typewriting	2	--
Duplicating Processes	--	2
Literature	2 or 3	2 or 3
Electives	--	3
	16 1/2 or 17 1/2	15 1/2 16 1/2

Commentary

Pasadena City College has developed a comparatively strong program in a relatively short period of time. A number of factors may explain this. As mentioned above, the earlier experience of Mt. San Antonio College was utilized in the design of the curriculum. The library staff has received good support for the program from the college administration. An outstanding program for student library assistants in junior and senior high schools exists in the public schools of Pasadena (described in a later section of this report). However, one of the most unusual features of the Pasadena program is the employment of a librarian almost solely for instructional purposes.

In almost all other programs visited or contacted instruction is provided on a part-time basis by individuals whose main responsibilities are in library service and administration. (Ferris State College is another important exception to this general rule.) At Pasadena City College Mrs. Sylvia Green was employed specifically to develop the instructional program and has supervisory responsibilities in the college library only one hour per day. For this reason she has more time to spend in counseling activities with individual students and in auxiliary duties, such as planning or implementing recruitment and placement efforts.

The overall design and execution of the program at Pasadena City College is characterized by a concern for important details, which is not possible at present in many other programs. The most probable explanation for this is willingness and ability on the part of the college administration and head librarian to give the program a higher priority than is usually the case.

PORTERVILLE COLLEGE

Porterville, California

Head Librarian - Frank Selvera

It was not possible to visit Porterville College, but information on its program was received through telephone communication and correspondence with its director. Mr. Selvera wrote:

> You will find Porterville College to be the epitome of the small community college. We have a very fine program and an excellent staff and, of course, a fine new library, so our work is interesting and challenging at all times. . . .
>
> We are in the process of re-organizing our basic course in librarianship so that it will follow a more complete schedule than in the past. This is to help the student and to enable us to disseminate information on a class level rather than an individual level.

His letter had enclosed the following description of the first (two-unit) course:

Catalog Description:

> Lecture - 1 hour. Library 4 hours.
> Pre-requisite - Consent of the librarian - All applicants are interviewed.
>
> An elective course to acquaint the general student as well as the future professional librarian with library arrangement and procedures. Under the personal supervision of the professional staff, the student learns the function and services of the library and the techniques necessary for efficient performance.

Required background and experience: Typing recommended. Ability to work well with others. Genuine interest in library service.

Learning experiences: First Semester

1. Must have a good working knowledge of the ten major categories of the Dewey Decimal Classification system and be acquainted with other classification systems.
2. Learn the format and general information contained on a catalog card.
   A. Learn the card catalog system used in the college library.
   B. How to use the card catalog efficiently enough to help others if necessary.
3. Study & importance of dictionaries.
4. Study, importance & use of encyclopedias - Learn format and make-up of many kinds of encyclopedias.
5. Learn use and purpose of Reader's Guide to Periodical Literature.
6. Learn general library regulations.
7. Learn processes of book circulation applicable to our library.
8. Information concerning magazines & newspapers.
9. Learn use and purpose of vertical file.
10. Simple filing methods.
11. Importance and use of reference and reserve materials.
12. Brief study of audio visual information as it pertains to everyday library procedure.
13. Learn about bibliographies, study them, and compile them.
14. Other pertinent ideas relating to above & not included in this outline.
    A. Desk procedure & practice.
    B. General library procedural practice.
15. Quizzes.
16. Final examination.

Although it is geographically some distance from both Gavilan College and College of the Siskiyous in California, Porterville College probably has faced common problems in the development of its library program. If a natural history of the development of community college programs for library technicians could be written, it might be that the programs at College of the Siskiyous, Porterville College, and Gavilan College represent three phases of the early stage of development.

To hypothesize the "laws" of development, the first phase is represented by the individual, apprentice-like instruction given at College of the Siskiyous. Mr. Selvera, at Porterville, is apparently moving into the second phase since he is attempting to "disseminate information on a class level rather than an individual level." But Porterville has not yet organized its program into four quite distinct courses as Gavilan College has attempted to do. It is suggested that all three of these programs are in different phases of an early stage of development, however, since none of them can offer a full 12-credit-hour major in a terminal-technician program leading to the Associate in Arts degree. This point was reached by Mt. San Antonio College around 1959. Porterville College and the other two colleges mentioned here may be moving through a growth period comparable to that of Mt. San Antonio College in the 1949 to 1959 decade.

Such "laws" of development for the natural history of library technician curricula are purely conjectural, of course, but they may be helpful in establishing reasonable boundary lines for the categorization of large groups of curricula in the future.

RIO HONDO JUNIOR COLLEGE

11962 East Florence Avenue

Santa Fe Springs, California

Joleen Bock,

Librarian

Rio Hondo Junior College, founded in 1964, is a public, tuition-free, two-year college of the state of California accredited by the Western Association of Schools and Colleges. The Library Science program at the College, modeled on the training program at Citrus College, is designed to prepare students for positions as library assistants. It provides a well-rounded cultural background in addition to the specialized training in the techniques essential to library service.

Four courses in Library Science are offered during the two-year program. Library Science 1 is for students interested in an industrial, school, government, or public library. Philosophy, procedures, tools, and techniques of library routine are emphasized; and practical training is offered in the college library. Library Science 2 focuses on elementary cataloging and reference tools, with emphasis on encyclopedias, indexes, dictionaries, and books dealing with biography. Practical training in a school library is included in the course. Library Science 3 is primarily a course in Reference with emphasis in the areas of social science, history, geography, art, literature, and music. Students receive practical training in a public library. The philosophy of public libraries and their administrative structure are also covered in this course. In Library Science 4 the student is trained in reference techniques, with emphasis in the areas of religion and mythology, philosophy, psychology, science, business, medicine, sports and applied arts. Practical work in the library is also included. All of the Library Science courses involve the student in clerical routines necessary for library operation.

The students' overall curriculum involves 66 credit hours distributed as follows:

First Year

	Units	
English 1A, 1B	3	3
Typing 20, 21	3	3
Library Science 1, 2	3	3
Government 2	3	
History 7A or 7B		3
Electives	4	4
Physical Education	1/2	1/2
	16 1/2	16 1/2

Second Year

	Units	
Art 7 or 8	2	
Library Science 3, 4	3	3
Masterpieces of Literature 44A, 44B	3	3
Office Methods 29		3
Health Education 10		2
Electives	8	5
Physical Education	1/2	1/2
	16 1/2	16 1/2

Commentary

The program at Rio Hondo Junior College is a very new program, and no judgments can be made about it at the present time. It is worth noting that library technician training was offered at the time of the opening of the school itself. It will be of interest in future years to observe how the growth rate of the library program compares with other programs in the school and overall institutional growth. The Rio Hondo effort is consciously modeled after the successful program which has existed at Citrus College for a number of years and enjoys the support of librarians in the immediate area. Healthy growth of the program seems quite likely in succeeding years.

SANTA ANA COLLEGE

Santa Ana, California

Santa Ana College is a two-year public junior college. It is among the older colleges in California, having been founded in 1915 as an extension of Santa Ana Senior High School. Unexplainably, information concerning its Library Assistant program did not appear in the results of the most recent Survey of Organized Occupational Curriculums of the U.S. Office of Education. Since it did not come to the author's attention until after the completion of field work, it was not possible to visit the school.

The description of the curriculum and courses as it appears in the college catalog is below.

LIBRARY ASSISTANT

Meets requirements for the Associate in Arts degree and employment.

The Library Assistant two-year curriculum prepares the student for a semi-professional position in all types of libraries. The library assistant curriculum has the following objectives:

To provide a background of general education, combined with basic library skills to prepare students to enter library work above the minimum clerk status.

To provide training in skills at an undergraduate level making possible entry into library work, without involving the long "in-service" training now needed for assistants.

To introduce the varities of library work into which a trained person may work.

To encourage those with high talent to continue into the graduate level of library science.

To provide extended training in library technique for the person who already has either the AA or the BA, who would be eligible for supervisory semi-professional work.

1. Must complete Santa Ana College General Requirements, see page No. 35.
2. Major Requirements:

Freshman			Sophomore	
Business 81A-81B	2	2	Library Science 52	3
Library Science 50	3		Library Science 53	3-4
Library Science 51	3			

Departmental Electives: English 34A-34B, 36A-36B, 42, 44A-44B.

Recommended Electives: Library Science 54, Library Science 55.

General: (In areas of special interest) Art 1A-1B; Music 2A-2B; Speech 1A, 2, 24; Languages; Philosophy 6A-6B; Anthropology 2; Economics 2; Geography 1, 2, 38; History 4A-4B, 38; Psychology 1B, 33; Sociology 1-2; Astronomy 1; Chemistry 2A; Geology 2; Biology 1A-1B; Physical Science 1A-1B.

LIBRARY SCIENCE

Library Science 50 Introduction to Library Service **3 units**

Class hours: 3 lecture.

Prerequisite: None.

Introduction to the field of library work, with emphasis on the use of library resources and opportunities in the field. Lectures, reports, discussions, problems on the history of libraries, books and printing; basic library tools; filing systems; classification systems; arrangement and uses of the card catalog; survey of types of libraries and services.

Library Science 51 Technical Services **3 units**

Class hours: 2 lecture, 3 laboratory.

Prerequisite: Library Science 50

Survey of the clerical duties connected with ordering and cataloging books; practice in the use of ordering tools; routines in ordering printed catalog cards; use of publishers' catalogs and Wilson bibliographies; the use of forms and records; filing rules.

Library Science 52 Circulation Procedures **3 units**

Class hours: 2 lecture, 3 laboratory.

Prerequisite: Library Science 51 or permission of the instructor.

Library practices connected with the loaning of books, their return and care; contacts with borrowers; and related library services.

Library Science 53 Library Internship **3 or 4 units**

Class hours: 1 lecture, 10 to 15 work experience.

Prerequisite: Library Science 52. To be taken in the last semester of the A.A. degree work.

Seminar type study with special attention to advanced work in bibliography, care of materials. Development of extended skills in specific areas of interest and aptitudes, with practice and supervision in a variety of libraries.

Library Science 54 Children's Library Service **2 units**

Class hours: 2 lecture.

Prerequisite: None.

Books for children, the philosophy of selection for children, introduction to classical literature, authors and illustrators; planning and administration of reading programs and story hours.

Library Science 55 Bibliography and Reference Materials **3 units**

Class hours: 3 lecture.

Prerequisite: None.

Reference books, their evaluation and use; bibliography.

SANTA BARBARA CITY COLLEGE

Santa Barbara, California

Santa Barbara City College is a two-year public junior college which offers a wide range of educational opportunities to youths and adults. It has an unusual history for a California college, having been organized originally in 1911. Shortly after World War I it was discontinued, and its work was taken over in large part by Santa Barbara State Normal School. Later this institution became Santa Barbara State College, and still later it became the University of California, Santa Barbara. In 1946 the need for a community college was felt again, and Santa Barbara Junior College was organized. The name was changed to Santa Barbara City College in 1959. At present there are more than 3,000 students enrolled in day and evening classes and approximately 10,000 enrolled in the Adult Education Division.

The Library Assistant curriculum was introduced in the Technical-Vocational Division of the school in 1961. The curriculum is organized around four three-unit courses in library techniques, which are part of a sequence leading to an Associate of Arts degree. In this, the curriculum is not unlike a number of such programs in California community colleges. This program is distinctive in that all of the courses are offered as evening classes. There are usually 25 to 30 students enrolled each semester.

The courses are organized as follows:

Library Services and Resources (3) I - first year: Survey of the evolution of libraries and basic information about the principal fields of library service. Study of current trends in libraries and librarianship. Organization of library collections of various types. Study of books, printing and publishing. Practical methods and programs for stimulating effective use of library materials. Practice in arranging exhibits and planning programs adapted to community or industry's interests and needs. Practice in obtaining information from library by use of card catalog, indexes, reference books and other materials. Talks by librarians in various fields, visits to local libraries.

Technical Processes (3) II - first year: Introduction to clerical and sub-professional library techniques, including: a) Order procedures: preparing orders, receiving books, keeping financial records; b) Circulation procedures: instruction in handling the circulation desk, sending overdue notices, answering simple location questions, keeping circulation statistics. Study of various types of circulation systems; c) Filing; d) Shelving and shelf reading; e) Preparing books and pamphlets for circulation. Methods of handling nonbook materials, including collections of maps, manuscripts, music and photocopies; f) Theory and practice of interlibrary cooperation; procedures in interlibrary loans; g) Evaluation and selection of books; techniques of acquisition by public, school, academic and special libraries; h) Keeping of library records; i) Current trends in information storage and retrieval; j) Elementary cataloging.

Cataloging and Classification (3) I - second year: Principles and practices of descriptive cataloging and subject cataloging, with application to various types of libraries. Comparative study of classification systems, including Dewey Decimal and Library of Congress systems. Study of subject heading lists and cataloging codes. Analysis and organization of serial and government publications. Treatment of special types of library materials. Typing catalog cards from master copy. Cataloging simple fiction. Checking shelf lists. Ordering Library of Congress cards.

Reference Procedures (3) II - second year: Introduction to general reference literature found in all types of libraries, including basic procedures in meeting reference problems and an understanding of what constitutes reference work. Study of national and trade bibliography. Introduction to Literature and bibliography in various subject fields: a) Science and technology: standard works, reference materials and bibliographic sources consulted by the general public, as well as scholarly research workers. Emphasis on reference and bibliographical aids. Periodical and serial literature in the physical sciences and its uses and control through indexes and abstracts. Problems of organizing technical reports and techniques of punched-card bibliography and reference sources in the medical and life sciences; notable books in the history of biological sciences; c) Social science; study of the development of the various divisions of the social sciences. Standard works, reference sources, bibliography, government documents; e) Humanities and fine arts.

The Santa Barbara City College program was one which was brought to the author's attention through reading Mrs. Aline Wisdom's survey (see Chapter II). This occurred after the field trip to California, so unfortunately it was not possible to visit the school. Mr. M. L. Huglin, Dean of Instruction, kindly provided information about the program by telephone and correspondence.

The Santa Barbara program was described earlier in an article by Mrs. Patricia Gebhard, reference librarian at the University of California - Santa Barbara. That article is reproduced below.

School for Ninety-Day Wonders

By PATRICIA GEBHARD

SANTA BARBARA, California, recently completed the first semester of its four-semester "School for Ninety Day Wonders" — a training program of the kind suggested by Carl W. Hamilton in the symposium entitled "Diagnosis" (*see* I j, Jan. 1, '63, pp. 44-5). Hamilton's article was a plea for some way in which his sub-professional staff could receive a professional polish and acquire some of the basic disciplines of librarianship.

William Hinchliff, when he became librarian of the Santa Barbara Public Library, found himself faced with the same problem, and took it to the local City College. Since the City College shapes its program to serve the needs of the community, it proceeded, with the help of Hinchliff and Ruth Little, the City College librarian, to set up a program for the workers they called sub-professionals. After initial planning, the program was sent out to determine whether there was sufficient interest to justify such a course. The response and final enrollment indicated that there was.

The program is planned to cover four semesters, at the end of which the student will have a major in library science for his Associate of Arts degree. In actuality, few of the students are A.A. candidates and few are interested in the credit as such. A number attend at the suggestion of their employers, but the majority enrolled for their own personal educational advancement to help them do a better job in libraries, or to prepare themselves for jobs in libraries.

As with most adult education classes, the course started with a large enrollment, well over 40 students. After the first three or four sessions, several heavy homework assignments and an impending mid-term examination, the class settled down to 25 regular students. About ten held no library position, though several of these had worked in libraries and most eventually hope to do so. Eleven members of the class were from the Public Library, two came from special libraries, two from the University Library, one from the County School Library, and two from other school libraries. During the semester two students took paying jobs in libraries and one other became a volunteer worker.

Although some basic planning had taken place, I was able to develop the course of study freely. The series included, for the first course, Library Services and Resources; for the second, Technical Processes; for the third, Reference; and the fourth dealt with simplified cataloging. The first course was planned to introduce and survey the whole field of librarianship, and as such, it presented the obvious difficulty of any course of this nature: too much to be covered for a thorough knowledge of any one section. However, the need for the students to gain a basic familiarity with many things that trained librarians take for granted made it essential for this first course to be inclusive, with more intensive treatment of various aspects in the later courses.

The second course was originally intended to deal with "clerical practices and procedures" — a type of course needed particularly for persons not yet working in libraries. Because of administrative problems, this section was postponed and the Reference course was scheduled for the second semester.

The first course was divided in two parts, with a mid-term examination and two historical sessions in between. The first half explained the work of every department within a library; the second half described the various types of libraries. Projects were worked out to give students practice during the first half of the course. This work will be even more essential in the clerical practices and procedures semester.

The course is given in night school at the City College. It began practically at the door of the college library with a discussion of the use of the library, including explanations of the catalog, classification, indexes, and bibliographies. For an assignment the students prepared a carefully specified bibliography on a subject of their choice. The assignment was too enumerative, but some compensation was made by many practice questions in class.

The next few sessions were devoted to reference work and reference books, and later class sessions discussed circulation systems, library promotion, the selection and acquisition of books, readers' advisory services, library cooperation and censorship. Claire Eschelbach, former head of the catalog department at the University of California, Santa Barbara, spoke to the group on cataloging, classification and book processing.

There were assignments covering each of these discussions, but since a large proportion of the group were working eight hours a day they found it difficult to complete these assignments. There was also the problem that the only library in Santa Barbara with anything like complete sources, the University of California Library, is too far away for most of the students to use it easily. Nevertheless, the assignments are a basic and valuable part of the course.

The second half of the course was taken up with visits to various types of libraries, including the University Library, the Santa Barbara High School Library, the General Motors Library, and the Santa Barbara Public Library. In every case, the librarians were extremely cooperative in discussing their libraries with the class, and the students found these visits particularly stimulating. They acquired an understanding which would have been impossible to convey through class instruction alone.

It is doubtful whether a thorough presentation of the history of the alphabet, the book and printing, or the history of libraries is absolutely necessary for a course of this kind. Yet the history of the public library movement and a discussion of United States libraries are basic to a knowledge of library service, and these should be included whatever other historical subjects are omitted.

Nor did we ignore the new age of the machine. The class was fortunate in having Peter Pocock, manager of the TEMPO Library at General Electric in Santa Barbara, speak at the last class meeting of the semester. Mr. Pocock served on the staff of Library 21 at the Seattle Fair and has a particular interest in the use of automation. He concentrated his attention of how machines and computers can be used both in library processes and information retrieval.

The students — and sometimes the teacher too — lamented the lack of an adequate text book, though without a text they had to rely more on their own ingenuity. Jean Gates' *Guide to the Use of Books and Libraries* (McGraw-Hill, 1962) served as a partial text, as did Louis Shores' *Basic Reference Sources* (ALA, 1954) for the reference sessions. But since each teacher has her own idea of organization, emphasis and inclusion, it is difficult to provide a text which would please all teachers.

The pros and cons of training nonprofessional librarians have been discussed for several years, and in some cases writers in favor of such training have suggested programs. It seems a little like burying one's head in the sand not to recognize, since many libraries have been forced to hire intelligent persons without library degrees, that it would be of great advantage to library service in the United States to give these people more training.

Courses like the ones offered in Santa Barbara might well be advantageous in other communities where there are no library schools and where many competent workers are unable, because of family responsibilities and insufficient college preparation, to attend a graduate library school. In addition to providing useful training, such courses can act as a recruitment device for those students who may later be in a position to work for a library degree.

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LAMAR JUNIOR COLLEGE

Lamar, Colorado

Since 1963 courses in library techniques have been offered at Lamar Junior College. These courses have been offered primarily in the Evening Program. A large percentage of the students have been employees in small libraries in southeastern Colorado, southwestern Kansas, and western Oklahoma. Unfortunately, further information about this program was not received in time for inclusion in this report.

CENTRAL YMCA COMMUNITY COLLEGE

19 South Lasalle Street

Chicago, Illinois

Library technology courses were offered at Central YMCA Community College for the first time in the 1964-65 academic year. Unfortunately, material on this program was not sent in time for inclusion in this report.

LANSING COMMUNITY COLLEGE

210 West Shiawassee

Lansing, Michigan

Don S. Pelkey,

Chairman, Instructional Resources Center

Lansing Community College, a public two-year college, is accredited by the North Central Association of Colleges and Secondary Schools and the Michigan Commission on College Accreditation. The Library Technology program which began at Lansing Community College in the fall of 1964 is the first such program in a Michigan community college. Discussion of the desirability of the program had been initiated by the Dean of the College in 1959. Mr. Pelkey had only recently joined the faculty as Librarian of the college at that time, and he continued these discussions with individuals from the Michigan State Library, the Lansing Public Library, and Ferris State College. Public libraries in Michigan are frequently integrated with school libraries, so the existing program is a cooperative project of the college and the Lansing Public Library. The Library Technology courses are given in the Lansing Public Library and taught by Library staff members. All other courses are taken at the community college campus.

The Library Technology program leads to an Associate in Arts degree. One Library Technology course is offered each fall, winter, and spring term during the two-year sequence. Introduction to Library and Use of the Library (LT 101) is a general course in the use of the library, including general background and philosophy of library service, especially in public libraries. Students receive instruction and practice in the use of the card catalog, Readers' Guide, encyclopedias, dictionaries, and general reference works. They receive practice in the shelving of books so that the arrangement of books on the shelves is understood. Book Selection and Order Selection (LT 102) presents principles of book selection with emphasis on the sources, which include book reviews, book lists, trade bibliographies, and publisher's annotations. The policy and practice of buying books and techniques of ordering and accessioning are included, as well as an introduction to elementary budget techniques and simple financial records.

Reference (LT 103) is a study of general reference works, more comprehensive than LT 101. It includes practice in the preparation of simple bibliographies, emphasizing correct form. Technical Services (LT 201) provides a study of the Dewey Decimal Classification System with problems and practice in simple classification. The purpose is to give an understanding of the classification numbers, not to make classifiers of the students. Emphasis is placed on working under direction and on typing catalog cards from prepared copy, with work on modifying printed cards. Also included is practice in filing in the various library catalogs.

Circulation, Maintenance, and Preparation of Materials (LT 202) teaches mechanical preparation, physical arrangement, circulation, and maintenance of books, periodicals, pamphlets, and other library materials; the acquisition of periodicals and pamphlets, records, and picture collections; and inventory methods, reasons for inventory, and records to be kept. Library Problems (LT 205) is a seminar-type course designed to integrate the technical course work of the preceding quarters. Special problems are assigned for investigation and reporting.

The overall curriculum includes the following sequence of courses:

Freshman Year		Fall Term	Credit Hours
LT	101	Intro. to Library	3
ENG	101	Composition	3
		Natural Science or Foreign Language	4
PE	101	Physical Education	1
PSY	101	Orientation	1
SS	101	Sociology	4
			16
		Winter Term	
LT	102	Book Selection & Order Procedure	3
ENG	102	Composition	3
		Natural Science or Foreign Language	4
SS	102	Economics	4
PE	102	Physical Education	1
			15
		Spring Term	
LT	103	Reference	3
ENG	103	Composition	3
BUS	107	Business Machines	3
		Natural Science or Foreign Language	4
SS	103	Political Science	4
			17

Sophomore Year		Fall Term	Credit Hours
LT	201	Technical Services	3
HUM	201	Western Civilization	4
BUS	110	Principles of Accounting I	4
		English Elective	4
			15
		Winter Term	
LT	202	Circulation, Maintenance, Prep. of Materials	3
HUM	202	Western Civilization	4
BUS	220	Office Management I	3
		Elective	3
		English Elective	4
			17
		Spring Term	
LT	205	Library Problems	2
SPH	104	Speech	3
BUS	204	Letter Writing	3
HUM	203	Western Civilization	4
		English Elective	4
PE	103	Physical Education	1
			17

Commentary

The Lansing program is another one that is too new to be judged. As the first such community college program in a state where community colleges are developing rapidly, it may serve as a model for later programs. Of course, the program at Lansing (and any future ones) is able to benefit from the pioneering efforts of Ferris State College in this field. The Lansing program appears to place slightly less emphasis on office practice skills than does Ferris; but the program is administered in the Department of Management and Marketing, so the business skills are not neglected.

The other curricula in the Management and Marketing Department are: Electronic Data Processing, Food Service Technology, Hotel-Motel Management Technology, Law Enforcement, Management Training and Marketing. The placement of the Library Technology curriculum in this administrative structure can be contrasted with the clerical orientation of such schools as Ferris, Mt. San Antonio College, or Pasadena City College, on the one hand, and the liberal arts emphasis of Citrus College or San Francisco City College, on the other. An important part of library operations might be called "customer service" in virtually the same sense that the term is used throughout the Management and Marketing Department of Lansing Community College. For this reason the association in the College of Library Technology with Hotel-Motel Management Technology is not entirely an administrative accident.

Marketing and library service have a common denominator in the degree to which skill in human relations is necessary for success in both fields. While this aspect of library technology has not been consciously introduced into the curriculum, the administrators of the program feel that marketing and management concepts can make a contribution to a library technology program. Only the future will tell how, and to what degree, such a development occurs. It seems clear, however, that the program at Lansing has the potential for a special kind of growth.

SALEM COUNTY TECHNICAL INSTITUTE

Penns Grove, New Jersey

Mrs. Catherine Nipe,

Librarian

Salem County Technical Institute is one of several such institutes in New Jersey that offer two years of post-high school training in technical fields. In addition to the Library Technical Aide program there are programs in: Drafting and Design Technology, Electronics-Instrumentation Technology, Scientific Glass Technology, Practical Nursing, Technical Writing, Mechanical Technology, Automotive Technology, and Horticulture.

The school is comparatively new. Mrs. Catherine Nipe organized the library when she came to the school in 1961 as its first librarian. Having worked as a librarian in high schools and in industry, she was aware of industry's needs and what might reasonably be expected of recent high school graduates. Therefore, the idea of some type of two-year program for library technicians was very much in Mrs. Nipe's mind when she came to the school. After a year of development activity the program was started in 1962 and produced its first two graduates in 1964. One of these graduates was immediately employed by the Technical Library of the E. I. Dupont Company in nearby Wilmington, Delaware. Six more students joined the program in its second year.

The curriculum and courses as they appear in the school catalog are as follows:

LIBRARY TECHNICAL AIDE

A two-year program designed to prepare library assistants for technical work in libraries—public school, hospital, government, and industry. Graduates are qualified for general library duties including ordering and accessioning books, processing materials, cataloguing, binding related pamphlets and periodicals, mending torn materials and keeping the vertical file up-to-date.

FIRST SEMESTER		Class	Lab	Credits	
B 106	Industrial Mathematics I	3		3	
B 135	Introductory Chemistry	3		3	
G 141	Communication Skills	3		3	
B 233	Anatomy and Physiology	3	3	3	
T 191	Introduction to Library Science	1	4	2	
T 192	Cataloguing and Classification I	2	6	3	
				—	17

SECOND SEMESTER					
B 207	Industrial Mathematics II	3		3	
G 245	Human Relations	3		3	
G 349	American History	3		3	
G 244	Literature	3		3	
T 294	Library Reference	1	4	2	
T 293	Cataloguing and Classification II	2	9	4	
				—	18

THIRD SEMESTER					
G 342	Technical Report Writing I	3		3	
T 151	Engineering Drawing I	1	3	2	
G 346	Industrial Organization	3		3	
G 347	Psychology	3		3	
T 395	Technical and Scientific Information Services	2	6	3	
T 396	Library Practice I	2	5	3	
				—	17

FOURTH SEMESTER					
G 443	Technical Report Writing II	3		3	
T 252	Engineering Drawing II	1	3	2	
T 497	Library Practice II	2	5	4	
T 498	Procurement & Maintenance of Library Materials	2	6	4	
T 499	Medical Records Library Practice		3	1	
G 448	Economics	3		3	
				—	17

T 191 INTRODUCTION TO LIBRARY SERVICE

A survey of library work, including the organization and arrang library materials. Special attention will be given to arrangement of libraries and technical school libraries.

T 192 INTRODUCTORY CATALOGUING AND CLASSIFICATION

The course presents an introduction to classification systems with emphasis on the Dewey Decimal classification. Course also includes, and processing library materials using basic bibliographic tools, anc nance of catalogue and other related files.

T 293 CATALOGUING AND CLASSIFICATION

A continuation of T 192. Actual practice in preparing and ma catalogue in school library is given, as well as projects covering oth situations.

T 294 LIBRARY REFERENCE WORK

A study of the basic reference tools, including general encyclopedias aries, handbooks, etc. In addition, the use of special reference tools trial and technical fields will be explained.

T 295 TECHNICAL AND SCIENTIFIC INFORMATION SERVICES

A study of indexes to and bibliographies of technical and scientif Emphasis is placed on abstracting technical and scientific periodica trips to technical libraries in the area supplies needed practical appli

T 396 LIBRARY PRACTICE I

Each student will have an opportunity to put into practice all of th techniques and devices studied to this point—from the allocation zation of funds to assisting a student with an assigned research pro

T 497 LIBRARY PRACTICE II

A continuation of T 396. More independent work for students w cluded with an assigned project in some phase of library work . . istration, an original classification system, etc.

T 498 PROCUREMENT AND MAINTENANCE OF LIBRARY MATERIALS

Instruction will be given in selection and procurement of materials o books, including pamphlets, house organs, periodicals and films. repair of these items will also be included in instruction.

T 499 MEDICAL RECORDS LIBRARY PRACTICE

Students are assigned to the medical library of an affiliated hospital vised practice.

Commentary

As the only existing program for library technicians in scientific and technical libraries, the development of the Salem program should be the object of much interest in the future. It appears to be one of the most scholastically demanding programs. The only comparable program is the one which formerly existed at Erie County Technical Institute in Buffalo, New York. That program focused on the special needs of chemical libraries. The Salem program attempts to give students a less intensive but broader familiarity with a number of scientific and technical disciplines.

The Salem program could obviously be developed only at an institution with a strong technical emphasis. That is, the range of scientific and technical courses required of the library students is possible only because many other students are preparing for technical careers in those fields. This means that library technical aides from Salem County Technical Institute have taken Anatomy and Physiology with students in the Practical Nursing Program; Engineering Drawing with students in the Drafting and Design Program; and Chemistry with students in the Chemical Technology program. The Salem library students have associations with a different group of students than do library technicians in most of the other programs surveyed. This may make a significant contribution to the acquisition of communication skills needed in a technical or scientific library.

THE UNIVERSITY COMMUNITY AND TECHNICAL COLLEGE

THE UNIVERSITY OF TOLEDO

Toledo 6, Ohio

Mr. Roy E. Barnes,

Program Coordinator

The University Community and Technical College is a two-year college on the campus of the University of Toledo.

The College has a two-year Library Technical Aide program leading to an Associate Degree in General Studies. The courses are offered in evening as well as day classes, permitting local libraries to encourage their employees to enroll in the program. In effect, the evening classes complement the in-service training programs that now exist in some libraries.

The Library Technical Aide curriculum includes six courses in Library Science. Introduction to Library Science (GS 184) is a survey of library work including a brief history of books and libraries, a description of the various types of libraries and the services they provide, an introduction to the organization and arrangement of library materials and to general reference materials. The course includes two hours per week of laboratory work in the University Library and field trips to other libraries in the community. Introduction to Children's Literature (GS 186) is a survey of types of children's literature and children's story interests on each age level. Fiction, folklore, poetry, illustration, and informational books are considered, with the emphasis on developing skills needed to assist children (and their parents) to select appropriate books in line with their interest, needs, and abilities. Library Reference (GS 281) is concerned with the organization and purposes of reference divisions in various types of libraries, such as public, college, university, school, and industrial. The student becomes familiar with reference materials of such subject fields as the social sciences, languages, the sciences, literature, and biography. Two hours per week of University Library laboratory work are required.

Circulation Techniques (GS 282) is a practical course that provides technical information on traditional and machine methods of circulation, including the charging and discharging of books and other library materials; preparing and maintaining circulation records; and familiarity with the organization and purposes of circulation divisions in various types of libraries through lectures and class discussions and by field trips to several libraries in the community. Library Practice (GS 283) provides instruction in the technical procedures for ordering and processing books and other library materials and in performing the various functions of the cataloging department in various types of libraries. Included in the ordering procedures is information on the allocation and utilization of funds, sources of order information, preparation of order forms, and maintenance of order files and records. Care and Repair of Library Materials (GS 284) includes instruction in the care and repair of books and more ephemeral library materials, including the techniques and practices of binding, sewing, indexing, and stapling, hand lettering, gold stamping, and repair of damaged pages. The student learns when to repair and when not to repair library materials and how to dispose of materials not worth repairing.

Technical and Scientific Information Services (GS 285) is a recommended elective designed to meet the needs arising from the growing awareness of the necessity for specialized library assistance in the area of technical and scientific information in education, research and development, and industrial applications. This specialized course includes indexes to and bibliographies of technical and scientific periodicals; initiating and maintaining contacts with individuals and organizations needing special materials; and problems of storage and retrieval.

GS 170, Science and Technology, taken during the Freshman year is a survey course which examines the development of scientific thought and technology as this development affects political, social and economic institutions. This requirement plus the recommendation that GS 285, Technical and Scientific Information Services, be taken as an elective provides the University of Toledo program with considerably greater emphasis on the needs of scientific and technical libraries than most other programs. Among existing programs, only the program at Salem County Technical Institute (described elsewhere) places a greater emphasis on science and technology.

The overall curriculum includes the following sequence of courses:

First Year

Typing I*	2
Communication Skills	3
Techniques of Effective Reading	1
Basic Mathematics	3
The Citizen in Society I: The American Scene	3
Human Relations I: Principles	3
Physical Education	1
	16

*Student may substitute an elective if he passes typing proficiency test.

Effective Speech	3
The Citizen in Society II: The Changing World	3
Science and Technology	3
Introduction to Library Science	3
Elective	3
Physical Education	1
	16

Second Year

Introduction to Children's Literature	3
American Economic Institutions	3
The Humanities I: An Introduction	3
Library Reference	3
Circulation Techniques	3
Physical Education	1
	16

The Humanities I: Fundamentals of Art and Music	3
The World in Perspective	3
Library Practice	3
Care and Repair of Library Materials	3
Elective	3
Physical Education	1
	16

Commentary

The program at University of Toledo is too new to make judgments of any sort. The first courses were offered in University Community and Technical College in the Spring semester of 1964; 12 students enrolled in the first class. Prior to 1964 an evening library course serving the purposes of general adult education had been offered, but the present curriculum was not really underway until 1964.

As in the case of Brigham Young University the University of Toledo has the facilities of a large university library to offer the library technician students. The holdings of the library are in excess of 500,000 volumes. Also like Brigham Young University there is an undergraduate library program in the School of Education and a graduate program offering an M.A. in Library Science. Offering three levels of library training within one institution will provide the University with unusual opportunities to explore and develop appropriate educational standards for the skill requirements of a variety of library positions

TREASURE VALLEY COMMUNITY COLLEGE

Ontario, Oregon

Mrs. Fern Prior, Librarian

Treasure Valley Community College is a comparatively new institution, having been established in 1962. It is a publicly supported two-year institution accredited by the Oregon System of Higher Education. The State Department of Education approves all terminal programs and technical instructors. The Library Technology program was established in 1964. The origins of the program were described in a letter to the author by Mrs. Fern Prior, Librarian, in the following terms.

> Our Library Technology course was begun last year at the request of a committee composed of the Vocational Director of Treasure Valley Community College, the high school librarian, the Malheur County librarian, the Ontario School Library Supervisor, a Baptist minister prominent in many civic activities and the college librarian.
>
> This committee saw the need for local training to man the various libraries in the community where often the librarian in charge had had no formal library training and frequently no college education. They challenged the college to do something to improve the libraries in Western Idaho and Eastern Oregon
>
> Specifications for each course were drawn and approved by the state.
>
> The first year classes were designed to familiarize the student with the library, its functions, routine jobs, and basic skills. The second year the Library Work Experience Program would involve all the skills acquired the first year. Typing is a pre-requisite, but other courses named in the catalog on page 33-34 were thought the minimum requirements necessary for a competent library technician.

Courses listed in the college catalog include the following:

6.410 Introduction to Library Science - 3 units
A course to acquaint the student entering a library science program with the broad scope of services a library offers and the techniques involved in making these library services available. This course will serve as a basis for persons continuing training in the area of Library Science as well as those seeking immediate employment.

6.411, 6.413, 6.415, 6.419, 6.421
Library Work Experience Program - 1 unit
Each student majoring in Library Science must come to at least twelve hours of library work per week under the supervision of a qualified Librarian and such hours must be approved by the instructor. The student is responsible for his own program, but will be guided by the instructor in selection and areas of experience needed. Prerequisite: Library Procedures courses 6.410, 6.412, or 6.414; or them concurrently.

6.412 Library Procedures - 3 units
A course designed to acquaint and train the student to proper procedures in Library References and its related areas. Prerequisites: Library Procedures, 6.410 or instructor approval.

6.414 Library Procedures - 3 units
A course to train the student in the proper methods of Library Cataloging and processing work. Class time will also be spent on the proper methods of book and material recovery. Prerequisite: 6.412, or instructor approval.

6.416 Critical Reading - 2 units
A survey course to instruct the student in the broad area of Critical Reading and proper library book selection for children up to high school age. Prerequisite: Sophomore standing or instructor approval.

6.418 Critical Reading - 2 units
A continuation course of 6.416 to acquaint the student with the reading needs of young adults. Prerequisite: Sophomore standing or instructor approval.

6.420 Critical Reading - 2 units
A continuation course of 6.418 to allow the student to become familiar to the adult library reading needs. Prerequisite: Sophomore standing, or instructor approval.

While comparatively new and untested, the program at Treasure Valley Community College seems well designed. It's future development should be observed with interest as an example of the way a small college can respond to the needs of local communities in a region which is not densely populated.

PUERTO RICO JUNIOR COLLEGE

Rio Piedras, Puerto Rico

Mrs. Ada V. Robinson,

Librarian

Puerto Rico Junior College is an independent institution chartered as a non-profit educational organization by the Government of Puerto Rico in 1950. It is accredited by the Middle States Association of Colleges and Secondary Schools. The Library Assistant program was initiated in September 1964. In a letter to the author Dr. Faith Preston, Vice President of the College, stated:

> . . . The College decided to make these courses available because it is virtually impossible to find personnel on the island trained as library technicians. Furthermore, there is in Puerto Rico, as there is elsewhere, an ever-increasing demand for this service.
>
> . . . We feel that an increasing number of students will avail themselves of this training in the future.

The curriculum and course descriptions as they appear in the college catalog are as follows:

LIBRARIANSHIP

LIBRARY 101 — *The Library in Society* ***Three credits***

Historical survey of libraries from ancient times to the present. Different types of libraries and services; social function and educational objectives. Inter-library relationship; co-operation and planning. Standards and current trends in the operation of libraries. Professional responsibilities and opportunities of librarians. Designed to orient the student in the field of library service. One semester

LIBRARY 111 — *Classification and Cataloging* ***Three credits***

The theory of classifying books and other library material; a comparative study of different methods and practice in the Dewey Decimal System of classification. Dictionary cataloging and the choice and form of subject headings; the filing of card catalogs. One semester

Prerequisite: Lib. 101

LIBRARY 113 — *Reference Service and Bibliography* ***Three credits***

The library as a reference center. Consideration of the general book collection and practice in the use of special tools such as encyclopedias, dictionaries, handbooks, indexes, almanacs and atlases in answering the questions most frequently asked in libraries. Each student is required to prepare a simple bibliography. One semester

Prerequisite: Lib. 101

LIBRARY 281 — *Selection and Evaluation of Library Material* ***Three credits***

Methods for the selection of books for home, school and public libraries. The use of bibliographies, catalogs, guides, and critical reports or essays for book evaluation; practice in writing annotations. One semester

LIBRARY 282 — *Principles of Library Administration* ***Three credits***

Application of theories and principles of administration to the organization and management of school and public libraries; special services characteristic of libraries; integration with activity programs. Routines for ordering and receiving books and library materials.

A seminar and laboratory course; students are required to practice in local libraries during one semester.

Prerequisite: Lib. 113

LIBRARY ASSISTANT

The following curriculum is designed to prepare students for positions as assistants in public and private libraries. The program provides a well-rounded cultural background in addition to specialized training in the techniques essential to library service.

Minimum requirements:

- 48 Credit Hours General Studies
- 14 Credit Hours Related Courses
- 15 Credit Hours Specialization
- Orientation — 1 semester, 1 credit (no honor points)
- Physical Education — 2 semesters, 2 credits (no honor points)

General Studies

48 Credits required in the following courses:

		Credits
English 101-102	Basic Course in English	6
English 207-208	Introduction to Literature	6
Spanish 101-102	Basic Course in Spanish	6
Spanish 213-214	Introduction to Literary Genres	6
Humanities 101-102	Introduction to the Study of Western Civilization	6
Humanities 201-202	Western Civilization	6
Social Sciences 101-102	Introduction to the Social Sciences	6
	Mathematics or Science elective	6

14 Credits required in the following courses:

History 205	History of Puerto Rico	3
Spanish 121	Puerto Rican Literature	3
Education 201	Audio-visual Materials	3
Psychology 101	Introduction to Psychology	3
Secretarial 120	Typewriting for Personal Use	2

15 Credits required in the following courses:

Library 101	The Library in Society	3
Library 111	Classification and Cataloging	3
Library 113	Reference Service and Bibliography	3
Library 281	Selection and Evaluation of Library Material	3
Library 282	Principles of Library Administration	3

BRIGHAM YOUNG UNIVERSITY

COLLEGE OF INDUSTRIAL AND TECHNICAL EDUCATION

Provo, Utah

Mrs. Hattie M. Knight,

Chairman, Library Science Department

In the fall semester of 1963, Brigham Young University began offering Library Technician training. With the subdivision of the General College at Brigham Young in 1965, this program was offered as a course of study within the College of Industrial and Technical Education. Students who complete the program are awarded the Associate of Arts degree.

The need for such programs in library training was discussed by Mrs. Hattie Knight, Chairman of the Brigham Young University Library Science Department, in the spring 1964 issue of Utah Libraries. She wrote:

> Library work has for a good many years been classed as professional and clerical. The critical shortage of well-trained and first class professional librarians has led to considerable thought and some training programs for developing a third category - the library technician. With three levels of skills it would be possible and practical to have the clerical worker who can file, type, use machines, and do many other routine tasks. The trained library technician could be expected to do any of these things and catalog many items, do order work, answer simple reference questions and compile bibliographies. These two workers would allow the professional to do the supervision, the planning and work on the difficult problems needing a high degree of judgment and/or authority, imagination, and leadership. . . .
>
> A training program of two years duration which would provide an associate degree or diploma in Library Technology would assure library administrators of personnel with at least two years of general cultural education and a good deal of specialized vocational education.

Before the Library Technician program was inaugurated in 1963, the need for and possibilities of establishing such a program were well established: Mrs. Knight had received favorable responses to letters sent to school and public libraries in the state of Utah; technical education in the General College of the University was well established; and the Library Department of the University was at hand with Library Science courses already being offered. The specific problems were those of recruitment and the provision of course materials.

During the two-year training program, in addition to instruction in general education and business procedures, six Library Science courses are offered. Use of Books and Libraries (111) is a study of the efficient use of library materials; card catalog; use of general reference books (bibliographies, dictionaries, encyclopedias, and indexes); and making of bibliographies. Classification and Cataloging (355) includes the theory and principles of classification and cataloging of books in libraries, with practical problems and laboratory practice. Library Organization and Administration (363) is a study of the general organization and administration in all types of libraries. Emphasis is placed on physical facilities, objectives, and management. Thirty hours of practice work are required. Book Selection (366) considers the principles, criteria, and practice in selection of books and other library materials. Introduction to Bibliography (370) is an intensive study of the content and use of reference books: encyclopedias, dictionaries, indexes, yearbooks, bibliographies, atlases, and biographies. Bibliographical form is stressed.

Lack of space in this report prevents reproduction of the thorough, detailed, and well-designed course outlines which have been prepared by instructors at Brigham Young University. In addition to coverage of basic material in ordering, cataloging, circulation, reference and administration in the courses listed above, library technicians at B.Y.U. receive instruction in the history of books and libraries to a much greater extent than do students in most technician programs. This is done in the sixth course, Library Science (585).

The overall curriculum includes the following courses:

Freshman Year		1st Term	2nd Term
English 111, 112		3	3
Health 130			2
Religion		2	2
Physical Education		1/2	1/2
Library Science 111	Use of Books and Libraries	1	
Library Science 355	Classification and Cataloging		3
Business Educ. 101	Fundamentals of typewriting.....	2	
Business Educ. 203	Speedbuilding in Production Typewriting		2
Electives		4	2
Humanities 101	Humantities (This may fill a general education requirement)		3
Library Science 363	Organization and Administration	3	
Total Hours		15 1/2	17 1/2

Sophomore Year		1st Term	2nd Term
History 170		3	
Religion		2	2
Library Science 370	Introduction to Bibliography	3	
Library Science 585	History of Books and Libraries		2
Library Science 366	Book Selection		3
Business Educ. 204	Advanced Production Techniques in Typewriting	2	
Business Educ. 206	Calc. and Posting Machines		2
Business Educ. 220	Business Communication		3
Education 406	Teaching Materials Lab	2	
Electives		3	5
Total Hours		15	17

Commentary

Though still in an early stage of its development, the Library Technician program at Brigham Young University has been well received by librarians throughout Utah and shows the potential for healthy growth in the next few years. The large Mormon Genealogical Library in Salt Lake City provides an important job market for graduates, along with the libraries of many smaller communities and school districts throughout the state.

A number of special features of the Brigham Young University program require further discussion. As a major university with a large modern library of more than 500,000 volumes, B.Y.U. is able to offer library technicians facilities unlike most other programs. Of the programs visited in this study, only the University of Toledo possesses library resources on a comparable scale. While B.Y.U. does not offer a Bachelor's Degree program in librarianship, it offered undergraduate library courses for more than 20 years preceding its initiation of the technician program. This was done to permit undergraduate Education majors to take enough library course work to qualify for a Utah State Certificate as a school librarian. Therefore, the resources of an experienced faculty were already available when the technician program was designed.

Another dimension will be added to the B.Y.U. library program in the fall of 1966 when a Graduate School of Library Science is opened. In the future B.Y.U. will be training library technicians in its College of Industrial and Technical Education, school librarians in the undergraduate division of the School of Education, and professional librarians in the Graduate School. The inclusion of three levels of library training within one university can be expected to contribute to an overall redefinition of professional library education.

CATONSVILLE COMMUNITY COLLEGE

Catonsville, Maryland

Mrs. Florence C. Wilmer,

Director of Library Services

Catonsville Community College plans to initiate a program in Library Technology in the fall of 1965. A brochure prepared by the college describes the program as follows:

This program is designed to provide a background in the philosophy of library service and the challenging role of the library in our changing society. Students are acquainted with the fundamental organization of libraries, classification systems, and catalogs and acquire, through actual experience, the technical skills necessary for assisting professional librarians.

Students learn good work habits, increase their powers of observation, and are prepared for rewarding and satisfying careers which are, at the same time, of benefit to their own intellectual growth.

SUGGESTED PROGRAM:

Freshman Year

First Semester

Orientation to College — Composition and Introduction to Literature — Physical Education — American History — Introduction to Library Service — Physical Science — Typing*

Second Semester

Composition and Introduction to Literature — Physical Education — History of Western Civilization — Library Resources — Physical Science — Typing*

Sophomore Year

First Semester

World Literature — Fundamentals in Public Speaking — Physical Education — Sociology — Acquisition and Technical Processes — Audio-Visual Materials and Equipment

Second Semester

World Literature — Physical Education — Secretarial Office Practice — Circulation Procedures — Psychology — Literature Elective

*Students already proficient in typing may substitute an elective

Proposed course descriptions are below.

LIB 101 - (3) Introduction to Library Service gives a brief history of library development with emphasis on the philosophy of libraries and library service in various types of institutions. Special attention is given to the library's challenging role and the relationship to the over-all educational program in our changing society. Incorporated are familiarity with different types of catalogs, a knowledge of catalog organization, classification systems, and a study of the book as an instrument of learning.

LIB 102 - (3) Library Resources covers reference books, general and specific, serials, indexes, government documents, pamphlets, and bibliographies both general and special. This is an introductory reference course including source material of great value to all students. Special emphasis on the tools needed as a competent technician.

LIB 201 - (4) Acquisition and Technical Processes deals with general work organization, the mechanics of all library materials and their preparation for use. It includes typing of catalog cards, orders, accession lists; familiarity with invoice handling, elementary budget techniques and simple financial record keeping.

LIB 202 - (3) Audio Visual Materials and Equipment covers use and simple maintenance; producing instructional materials; knowledge and use of technifax, thermofax and all reproducing machines and processes including slides. To be further developed.

LIB 203 - (4) Circulation Procedures covers all desk routines including filing of circulation, periodicals, pamphlets and catalog cards. The fundamentals of public relations, philosophy and techniques of exhibits, technique of inventory with shelf list control, scheduling, and ordering of LC and Wilson cards.

MIAMI-DADE JUNIOR COLLEGE

Miami, Florida

Miami-Dade Junior College plans to initiate a two-year program for Library Technical Aides in the fall of 1965. Proposed course descriptions are as follows:

LIB 111 Philosophy of Library Service - 3 hours
Short history of libraries and library service. Introduction to card catalog, book catalog, classification systems with emphasis on Dewey Decimal system, shelf arrangement. Explanation of departmental organization and inter-relationship of departments.

LIB 112 Library Acquisition Procedures - 3 hours
Sources and structure of some common book selection aids. Acquisition techniques, elementary budget techniques, simple financial record-keeping. Introduction to some basic bibliographic tools. Prerequisite: None

LIB 121 Library Circulation Routines - 3 hours
Study of some routine circulation procedures, including circulation of books, pamphlets, and other materials. Techniques of physical inventory using shelf-list control.

LIB 211 Library Resources - 3 hours
Study of some basic reference sources, including general encyclopedias, almanac-type yearbooks, dictionaries and an overview of types of reference materials available.

LIB 212 Library Technical Processing - 3 hours
A more detailed study of the Dewey Decimal classification system, with emphasis on understanding the meaning of the numbers, and how these numbers are used to arrange materials. In addition, students will receive practice training in preparation of materials for library use. This will include typing prepared catalog cards and other technical processes. Laboratory.

LIB 221 Library Internship I - 3 hours
Six hours per week of supervised library training in an approved library. This will include some experiences in the A-V, T. V. area.

LIB 222 Library Internship II - 3 hours
Continuation of LIB 212.

The proposed curriculum is below.

FRESHMAN YEAR

First Term		Credit Hours
LIB 211	Philosophy of Library Service	3
BUA 113	Basic Calculating Function	3
SEC 111	Typewriting I	3
COM 101	Communications	3
SSC 101	Social Science	3
	Natural Science	3
PED	Physical Activities	1
		19

Second Term		
LIB 112	Library Acquisition Procedures	3
LIB 121	Library Circulation Routines	3
COM 102	Communications	3
SSC 102	Social Science	3
	Natural Science	3
SEC 112	Typewriting II	3
PED	Physical Activities	1
		19

SOPHOMORE YEAR

First Term		
LIB 211	Library Resources	3
LIB 221	Library Internship I	3
COM 201	Communications	3
HUM 201	Humanities	3
	Natural Science	3
	Elective	3
PED	Physical Activities	1
		19

Second Term		
LIB 212	Library Technical Process	3
LIB 222	Library Internship II	3
COM 202	Communications	3
	Natural Science	3
HUM 202	Humanities	3
BUA 114	Machine Accounting Systems & Procedures	3
PED	Physical Activities	1
		19

CHAPTER V

RECRUITMENT

When the present survey was begun, no particular thought was given to the subject of high school libraries or the library experience of high school students. Time and again, though, this experience was mentioned by library technicians being interviewed. The transcribed interviews reproduced in earlier sections offer illustrative examples. No quantitative statistics were kept, but the interviewer was impressed with the consistency with which students in New Jersey, Michigan, Utah, and California mentioned their high school library experience in some way. For this reason information about high school library activities was collected from various directors of technician programs.

A number of directors speak to high school audiences about library work as a career, and almost all of them wish they had more time for this kind of activity. Many of the programs have descriptive brochures, and increasingly these are being distributed to high school students and counselors. Such activities are necessary if students are to be attracted to library technician programs, but high school graduates seem unlikely to respond unless their previous library experience has brought them to the appropriate state of readiness.

Two high school library programs that seem worthy of special mention were brought to the interviewer's attention. For a number of years the Graduate Department of Librarianship of Western Michigan University has conducted a summer workshop for student library assistants. The seventh such workshop was held in Kalamazoo from June 27 through July 2, 1965. The advance announcement of the workshop contained this statement:

> Students who will be sophomores, juniors or seniors in high school in the fall of 1965 are eligible.
>
> High school students who are serving as assistants in either school or public libraries and who plan to continue as a library assistant during the next school year and students who are eager to share library know-how with others and who are seeking new ideas for their own library are invited to participate. Each school is limited to two students to attend the workshop. Preference will be given to those students who have not previously attended the workshop.

This annual workshop has been a popular and educational experience for many Michigan students. While there may be similar activities in other states, the author is unaware of summer programs oriented so specifically to the needs and interests of student library assistants. An earlier description of this program was written by Julia M. DeYoung. Her article, "Michigan's First Effort," appeared in School Libraries, IX (January 1960) on pages 24-25.

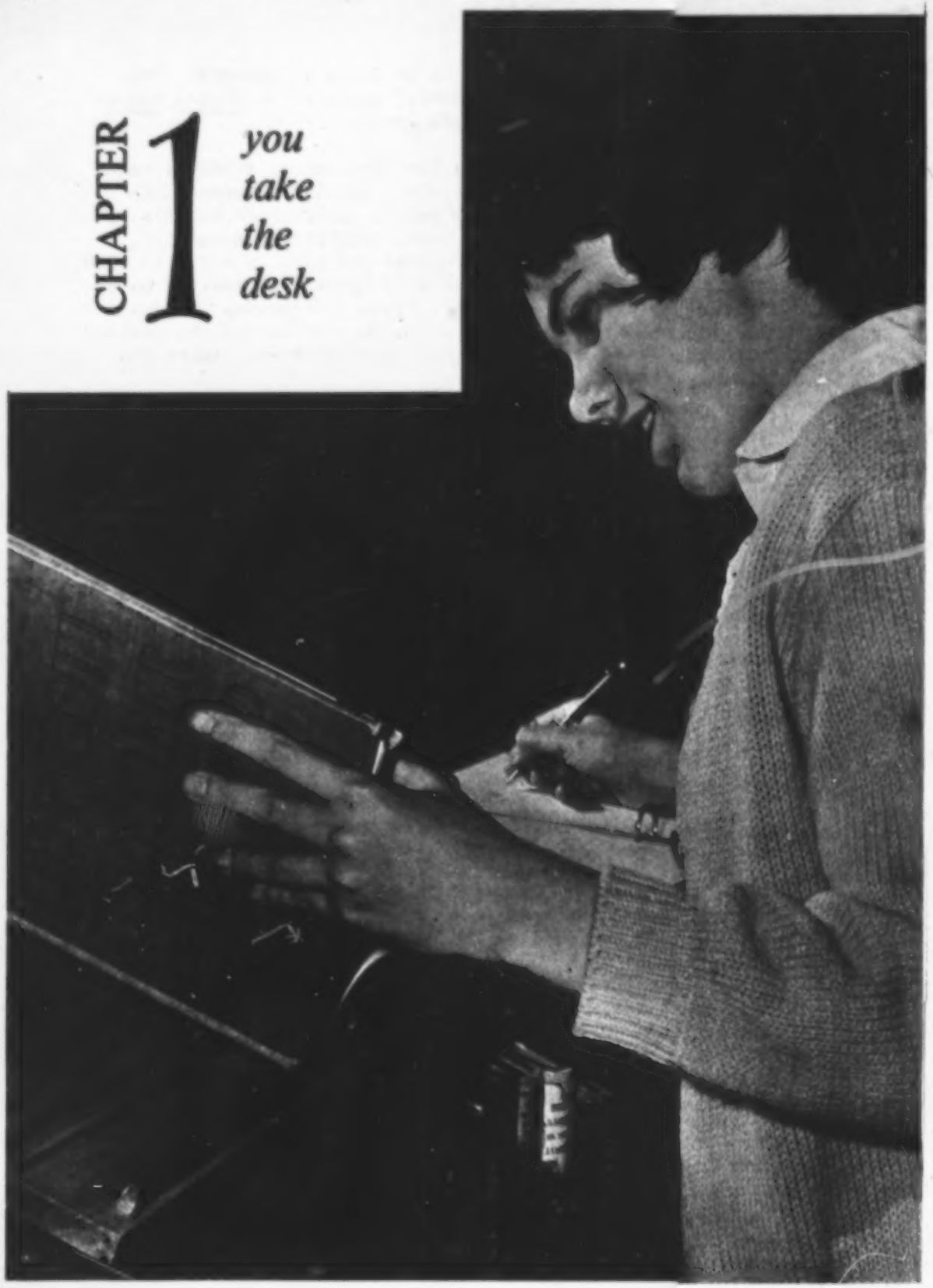
A second library activity for high school students came to the attention of the author when visiting Pasadena City College in California. In the public junior high schools of Pasadena library practice has been organized as a subject, utilizing a training manual prepared and used as early as 1950. In 1962 the original edition of this manual was revised under the direction of two junior high school librarians, Gladys Weldon and Helena Lee Corcoran. In the preface to the revised edition Robert E. Jenkins, School Superintendent, makes the following statement:

> This manual has been created primarily as a textbook for students taking library practice as a subject. However, it is also designed to serve as a resource unit for classes developing library and research skills. In addition, students who individually wish to increase their effective use of sources of information will find it helpful.
>
> The contents, which have grown out of the experiences of our librarians in conducting library practice classes, have been organized to help train a more efficient student staff, enabling them to render valuable assistance to the librarians and giving them skills that will make their school work easier.
>
> The final goal which we hope to achieve is an increased interest in books, libraries, and librarianship.

One of the impressive features of the Pasadena student manual is that it has been designed for junior high school students. (The senior high school students do not take a library course, as such, but come into the library on the basis of their Office Practice assignments in the commercial curriculum.) When it is observed that a considerable proportion of the nation's seventh and eighth graders attend schools which do not even have a library much less library service and library training, it seems likely that student assistants in Pasadena junior high schools enjoy a school library experience that is not frequently matched elsewhere.

The Pasadena manual is well designed in the typographic as well as pedogogic sense. With permission, sample sections of the manual are reproduced on the following pages. Copies of this publication are available from the Coordinator of Learning Materials, Pasadena City Schools.

CHAPTER 1 *you take the desk*



NOW YOU ARE A LIBRARY ASSISTANT

To dozens of students, faculty members, and visitors, you represent the library. These people will judge the library and, to some extent, the school by the service you give, the attitudes you have, and personal qualities you display.

The service a library assistant gives should be ready and cheerful. The attitude of a library assistant should combine enthusiasm with dignity.

The personal qualities of a good library assistant are many. You were chosen for the Library Practice class because you have already shown that you are a good citizen. Begin now to cultivate these qualities: punctuality, accuracy, attention to detail, neatness, a quiet and courteous tone of voice. A library assistant is expected to be cheerful, patient, dependable, and resourceful. A sense of humor helps.

YOU ARE NOW ASSIGNED TO THE DESK FOR THE FIRST TIME

You take the date stamp in hand and feel that you are in business. You have seen library assistants working at the desk dozens of times; you are sure you know exactly how to do it.

Here comes the first rule for a library assistant:

Never undertake any task in the library until the librarian has shown you how it is to be done.

This is closely followed by a second rule:

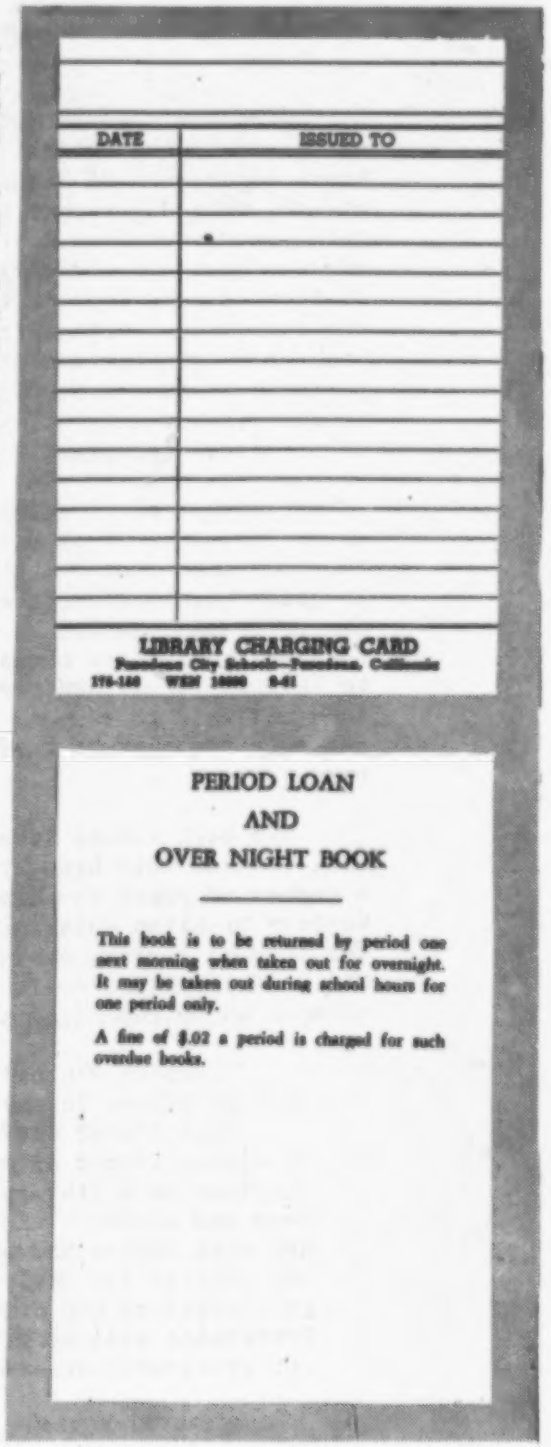
If you are not absolutely certain: ask!

When you ask, always ask the librarian. There is not much point in asking another library assistant who knows no more about the subject than you do, especially since, like all human beings, she hates to say "I don't know," and may only add to your confusion with misinformation. When you are not sure, admit it, and ask for information or directions. No one was ever born knowing all about library procedures.

YOU CHARGE BOOKS

When a student presents a book to you and wishes to take it out, look at the *book card* to be sure it is a book that circulates. If it has a plain white book card, have the student write his name on the first open line on the book card. Be sure that he signs both his first and last names and that his signature is legible.

You stamp *the date due* on the book card opposite the borrower's name and again on the *date due slip* in the book. Be sure the date stamp is readable and comes at the end of the other dates already stamped on the date slip so the borrower will know at a glance



DATE	ISSUED TO

LIBRARY CHARGING CARD
Pasadena City Schools—Pasadena, California
176-160 WEM 16000 9-61

PERIOD LOAN
AND
OVER NIGHT BOOK

This book is to be returned by period one next morning when taken out for overnight. It may be taken out during school hours for one period only.

A fine of $.02 a period is charged for such overdue books.

CHAPTER 2 *you shelve the books*

YOU LEARN ABOUT CLASSIFICATION

As a student librarian you must learn how library books are arranged on the shelves. You will discover that some orderly arrangement has been worked out, and it becomes your job to help keep these books in order.

Order is essential to a library. It is essential wherever many things are gathered together in one place, if these articles are to be made available. This is true in offices, stores, warehouses, kitchens, and even in bureau drawers. As a general rule similar things are put together. For example, in the grocery store all the soups will fill one section of the shelving, the washing powders and soap another. This plan for putting similar articles together may be thought of as classification —putting things in classes or groups to make an orderly arrangement.

To keep library books in an orderly arrangement so they can be found, the books must be classified into groups or classes, and then marked on the backs with numbers to show where they belong in the library. Every book must be marked so it will be shelved with others of its kind, for books on the same subject are always shelved together. Putting books into classes according to their subject matter and giving each class a code number is called *classification*.

Most of the libraries in this country use the same system for classifying and numbering books. It is a plan worked out by Melvil Dewey who is often called "the father of modern libraries." This plan, called the *Dewey Decimal Classification System*, arranges books in ten main classes and subdivides these main groups into many smaller divisions. Numbers are assigned to each group, with decimals for the smallest divisions.

Following are the ten main classes and the general numbers (each class has a general name and is designated by a digit followed by two ciphers):

000 GENERAL WORKS:
Encyclopedias, newspapers and books whose subject matter is too general to be put in any specific class.

100 PHILOSOPHY:
Books on the processes of thinking, psychology, personality.

200 RELIGION:
Books about all religions, mythology.

300 SOCIAL STUDIES:
Books that show in some way how human beings get along together; subjects such as schools, government, commerce, banking, etiquette, customs, and legends.

400 LANGUAGE:
Dictionaries, grammars, composition.

500 SCIENCE:
Mathematics, astronomy, nature study, chemistry, biology, zoology, and the other natural sciences.

600 USEFUL ARTS:
Books to aid us in making our living, improving the conditions of life or applying scientific knowledge. The "how to do" books, such as books on radio, aeronautics, ships, home economics, forestry, medicine, agriculture.

700 FINE ARTS:
Architecture, painting, drawing, photography, music, recreation, games.

800 LITERATURE:
Poetry, essays, orations, drama.

900 TRAVEL, BIOGRAPHY, HISTORY

These main groups are all subdivided into ten other divisions. For example:
900 Books about world history
910 Books of travel and geography
920 Biographies
930 Ancient history
940 Medieval and modern European history
950 History of Asia
960 History of Africa
970 History of North America
980 History of South America
990 History of Oceanic and Polar Regions

Again, each of these divisions is subdivided into ten smaller groups. Take for this example the numbers that stand for travel and geography:
910 Travel in many different countries, voyages, geography books
911 Historical atlases
912 Atlases
913 Archeology
914 Description and travel about European countries
915 Description and travel about Asiatic countries
916 Description and travel about African countries
917 Description and travel about North America
918 Description and travel about South America
919 Description and travel about Islands of the Pacific and the Polar Regions

CHAPTER 3 *consult the card catalog*

WHAT IS THE CARD CATALOG?

In every library there is a piece of furniture made up of a number of small drawers. Open these drawers and you will find cards arranged in alphabetical order according to the words on the top line of the cards. These cards form a catalog of all the books in the library, so this cabinet is called the card catalog.

It is similar to an index in a book because it points out information and tells where to find that information. Like the book index, it is arranged alphabetically. Sometimes the card catalog is compared to a telephone directory. Just as you use the phone book to find out what numbers to dial, you use the card catalog to find a library book's number. In your home a telephone without a telephone directory would give you limited service, so a library without a card catalog would not serve the people very well. Learn to consult the card catalog as you would the phone book, keeping in mind that both are alphabetically arranged.

WHY ARE CARDS USED?

Because new books are constantly being added and old ones discarded, the library catalog is put on cards so the cards can be inserted or removed as needed.

Instead of having just one card for each book, two or more cards are generally made for each book. Nonfiction books have at least three cards each, sometimes more. This is done so the card catalog can answer three important questions:

1. What books does the library have by a certain author?
2. Does it have a book of a certain title?
3. What books does the library have about a certain subject?

WHAT INFORMATION IS PUT ON THESE CATALOG CARDS?

Look at the sample cards given below. Note that they are for the same book. Each card answers one of the questions by referring to a particular book.

On each of these cards the class number for the book is given in the upper left-hand corner. But some cards have no numbers in that corner. That means they represent fiction books. Fiction books are not given Dewey Decimal Classification numbers, but are arranged on the shelves by the authors' last names.

Yes the library has a book by Peterson. **Author Card**

598.2 Peterson, Roger Tory
A field guide to western birds.
Houghton, c1941.
240p.

Yes the library has a book by this title. **Title Card**

598.2 Field guide to western birds.
Peterson, Roger Tory

Yes the library has a book about birds. **Subject Card**

598.2 Birds
Peterson, Roger Tory
A field guide to western birds.
Houghton, c1941.
240p.

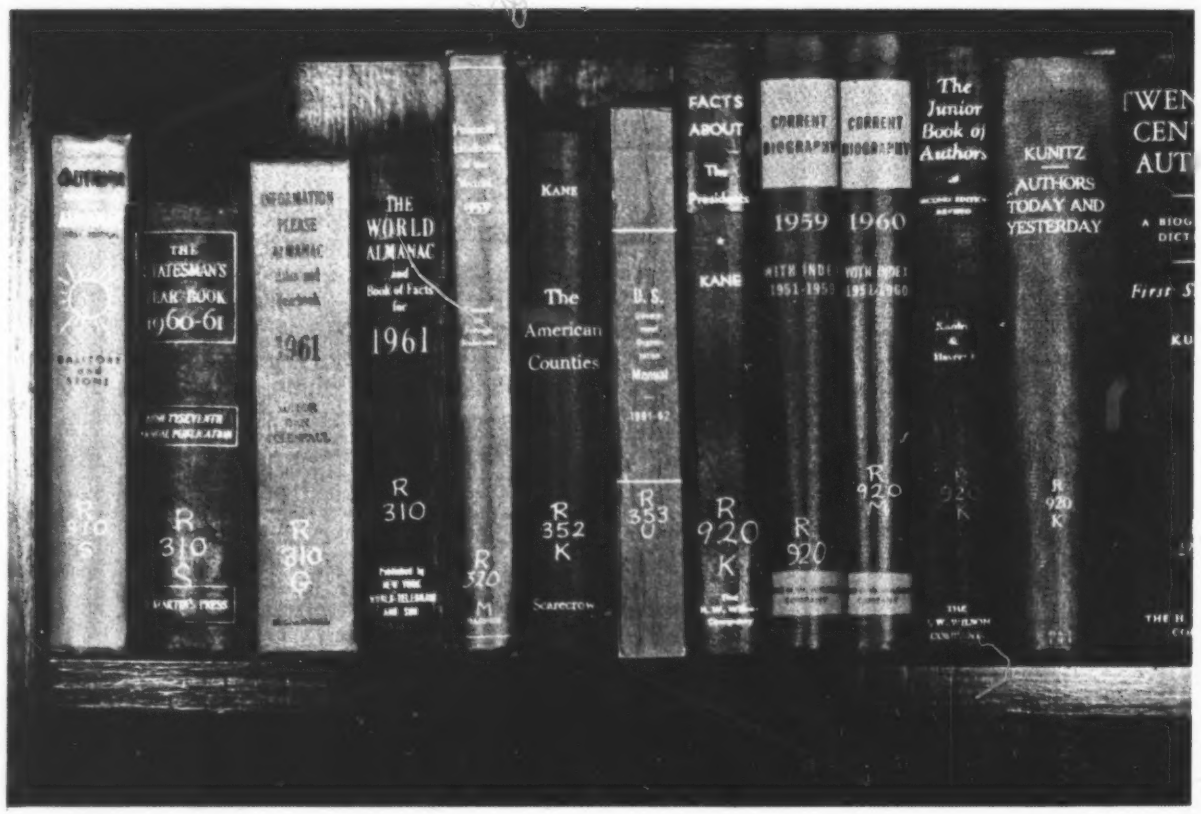
When consulting the card catalog look especially at the upper left-hand corner of the card to find the location of the book you want.

Next check the information given on each card.

On the *author card* you find:
- Author's full name on the top line
- Title of the book
- Publishing company
- Date
- Number of pages

On the *title card* you find:
- Title of the book on the top line
- Author's name

CHAPTER 8 *statistical and biographical reference books*



In your school library there are shelves marked "Reference." The books on these shelves have an R, or Ref., above or beside their class number to show that they belong on these shelves. As the name implies, these books are kept for ready reference. They are not books you will read from cover to cover, but are useful because they will provide a quick way to get the answers to puzzling questions. Some are books of facts, some specialize in statistics and current events, others have literary or biographical material.

You have studied about the dictionaries and the encyclopedias which are *general reference books*. This lesson deals with some of the best known *special reference books*. Their titles are given below. Look at each book; copy its title and answer the questions given for it. Indicate the page on which you find the answer.

YEARBOOKS

Statesman's Yearbook

Gives statistics about the countries of the world. It covers the government, rulers, area, population, religion, education, finance, commerce, agriculture, etc., of each country. Since it is published in England it gives first the countries of the British Commonwealth, then all the states of the United States, and third all other countries in alphabetical order.

1. What is the area of any country in Europe?
2. Give the four leading religious denominations of any state in the U.S.
3. Compare the U.S. with any other country as to the amount of one agricultural crop produced in one year.

The World Almanac and Book of Facts

One of the cheapest but most valuable of reference books. It has much out-of-the-way information and statistics on nearly every subject. The index is in the front of the book. As each page is packed with information in fine print, it is only by using this index that the reader may find that for which he is looking. This book is published at the beginning of each year by a New York newspaper.

4. How far is it from any one city in the U.S. to any other? (by automobile)
5. Who is the U.S. champion in any one sport? (golf, tennis, badminton, etc.)
6. How many books does any one of the five largest cities in the U.S. have in its public libraries?

Information, Please Almanac

Similar to the *World Almanac* but easier to read. It comes out yearly and gives latest information about many subjects.

7. Find the Charter of the United Nations. Copy paragraph 2 from Chapter I, Article I.
8. What daily newspaper has the largest circulation in the United States? How many copies are printed daily?
9. How many public schools are there in any two states of the United States? How many students in each of these states?

BIOGRAPHICAL REFERENCE BOOKS

There are many fine reference books giving short biographical accounts of famous or near famous persons. These sketches are arranged alphabetically and are often accompanied by pictures of the individuals.

Dictionary of American Biography

Contains authoritative and lengthy biographies of Americans who merit mention for any contribution to our country. Only those dead are entered; hence, the nickname, "The American Graveyard."

10. When was John Marshall Chief Justice of the Supreme Court?

Current Biography

Comes out monthly as a magazine with pictures and biographies of people currently prominent. There is also a bound yearbook containing all the biographies of the year arranged in alphabetical order and an index to all previous volumes. Each issue (monthly or yearbook) also gives lists of names grouped by professions such as law, medicine, motion pictures, etc.

11. Find the biography of a person currently prominent in politics, music, or sport.

Commentary

Although an objective evaluation of library experience in high schools might be difficult to accomplish, the activities in Michigan and California which have been described suggest the desirability of further research in this area. In a letter to the author Mrs. Helen Sebby, Head Librarian of the Pasadena Schools, mentioned that ". . . several of our students have developed an interest in professional librarianship as a career, and many of them have obtained assistant jobs at college libraries as a result of their training."

The existence of the high school programs in areas where strong library technician programs are also present inclines an investigator to look for direct causal relationships. Something more than mere coincidence is probably involved, but the relationship does not seem to be simple or direct. The basis for caution in inferring a causal connection between high school and college programs is the comments of students during interviews. While many of them mentioned their high school library experience, it is not at all clear that they viewed library work as a career possibility while they were in high school. A more reasonable presumption might be that they (and teenagers generally) didn't view anything as a career possibility. Working in the school library and belonging to a Library Club are more likely to be perceived by high school students as important social activities than as preparation for a career.

When these students graduate and enroll at a community college, though, they are asked to make new and different kinds of decisions. They must choose a major field of study, i.e., plan a career. In this situation they, not surprisingly, tend to choose from whatever range of alternatives their past experience has provided. If they worked in their high school library; if their college offers library technician training; and if they must choose a major field; then, and often not until then, does the possibility of a library career begin to emerge. In short, what might have been an enjoyable social pastime in high school is perceived at a later time as an employment opportunity.

Obviously, the same analysis could be made of career decisions in many occupations. The lesson of all such arguments would appear to be that exposure to a range of occupational experiences rather than specific vocational training or recruitment efforts which attempt to "sell" a given occupation is what is needed at the high school level. An interesting corollary to this line of reasoning is provided by the experience of the program at Ballard School of the YWCA in New York City

Originally, the planners of the Ballard program expected to use the clerical course activity to attract new library personnel as well as train subprofessionals already employed. Miss Elizabeth Ferguson, one of the originators of the program, pointed out to the author that a great many young women seeking employment come to New York City and live at the Central YWCA. They frequently attend classes at Ballard School. While working for a New York publishing firm seems to be the chief ambition of a disproportionate number of these young women, some of them do find satisfying employment in special libraries, and even more of them probably could do so. When the library clerical courses were first offered, it was thought that some of these job seekers would enroll in the classes. By and large this has not happened.

The analysis of the role of library experiences during high school years suggests an explanation of the Ballard program's apparent inability to attract potential library workers. It may be too late to attract potential library workers if the recruiters must wait until after the job seekers have come to New York City. Or, more precisely, the formal classroom environment that provides training cannot also serve recruitment purposes if the necessary exposure to library work has not already taken place. This is not to say that Ballard School could not undertake a successful recruitment effort; however, in any such effort use of the present training program probably would not be the procedure of choice.

Finally, it should be noted that a good library experience for high school students can be justified quite apart from its possible function in preparing students to make career decisions at a later time. As Mr. Robert Jenkins stated in his preface to the Pasadena Library practice manual:

> In addition, students who individually wish to increase their effective use of sources of information will find it helpful.

Contemporary society is providing an environment increasingly rich in information resources for all citizens. Learning to live and function in the midst of an on-going "information explosion" may require that all high school students ". . . increase their effective use of sources of information . . .."

CHAPTER VI

EMPLOYMENT

Assuming that society needs library workers with the kinds of technical skills described in the preceding chapters, at least two kinds of relationships must be developed before library technicians can be successfully employed. First, the work of library technicians must be carefully articulated with that of their professional supervisors. Equally important, employers must be able to accommodate library technicians within their personnel structure in a meaningful way at wage rates attractive to potential employees. Examples of the programs or policies of different professional organizations will be cited to indicate aspects of professional-subprofessional relationships, and the employment status of library technicians will be illustrated below with examples chosen from public library systems.

The Professional Societies

In the programs which have been described in this report the Special Libraries Association (SLA) has had greater involvement than any other professional society. The Ballard School program might better be termed the "Ballard-SLA" library clerical program since the New York City Chapter of the Special Libraries Association initiated it and continues to provide academic leadership. As Mrs. Ruth MacDonald mentioned in her thesis, the Erie County Technical Institute program received strong support and cooperation from the Western New York Chapter of the SLA. In the fall of 1960 the Boston Chapter of SLA gave two courses for subprofessionals which generated considerable discussion among librarians. (See Special Libraries, July August 1961, pp. 300-307). More recently the San Francisco Bay Area Chapter of SLA has conducted workshops for library assistants, and SLA members in the Los Angeles area have cooperated with Dr. Helen Earnshaw to provide fieldwork experience for students at Los Angeles Trade-Technical College.

SLA members must be credited with significant and considerable contributions to the development of library technician training. In saying this, however, it should be pointed out that individual members and individual chapters of the organization have done most of this work. As a professional society the Special Libraries Association has not taken official action regarding library technician training. This statement must be qualified with the observation that the Education Committee of SLA recently recommended future activities in the area of subprofessional training. (See Special Libraries, September 1965, p. 492).

The professional society that has clearly made the strongest response to the need for technician training is the American Association of Medical Record Librarians (AAMRL). Medical records librarianship is a specialized discipline not considered central to the main purpose of this survey, so its programs have not been described. As an example of the way professional-subprofessional relationships can be organized for mutual advantage and greater service, however, the experience of the AAMRL might provide many useful lessons.

Schools for medical record librarians and medical record technicians are approved by the Council on Medical Education of the American Medical Association in collaboration with the Committee on Education and Registration of the AAMRL. In addition to the establishment and maintenance of standards for professional and technical levels of education, the Association offers training itself through correspondence courses. A short statement on "Guidelines for the Development of Medical Record Technician Programs in Junior Colleges" is available from the Association, along with the much longer School Administration Handbook for Schools For Medical Record Technicians. The June 1964 issue of the Association's journal listed schools for medical record technicians in 13 states. In short, the American Association of Medical Record Librarians has taken very seriously the task of defining the supportive role of technicians, specifying the nature of desired training and actively cooperating with junior college administrators to implement these policies. The materials mentioned above are available from the Association's headquarters at 840 North Lake Shore Drive, Chicago 11, Illinois.

The leadership of the Medical Library Association (MLA) and individual members of that society have given strong support to technician training as evidenced by the recent statement of MLA President Alfred Brandon at a Congressional hearing. (See Hearings on the Medical Library Assistance Bill before the House Committee on Foreign and Interstate Commerce, September 14-15, 1965.) At that time Mr. Brandon cited an article by a former President of the Medical Library Association, Miss Gertrude Annan: "Library Technicians: Need, Training, Potential" (Bulletin of the MLA, Vol. 52, No. 1,

January 1964). In that article Miss Annan suggested, "Just as the training and accreditation of practical nurses have elevated standards of the registered nurses and freed them from routine duties, so could the training and accreditation of library technicians favorably affect programs of librarians." No such official action has been taken as yet by the Medical Library Association.

Although not an official action of the Medical Library Association, the activities of one of its members deserve special mention. Miss Helen Yast, Librarian of the American Hospital Association, has organized and conducted workshops for hospital library personnel since 1959. The most recent of these was offered by the American Hospital Association in Minneapolis, Minnesota, October 18-22, 1965. The development of these workshops was described by Miss Yast in the January 1964 issue of the Bulletin of the Medical Library Association.

The largest professional society in the library field is the American Library Association (ALA). One of the most recent actions of the Association in regard to subprofessional training was taken by one of its divisions at the 1965 midwinter A.L.A. meeting in Washington, D.C. At that meeting the Executive Board of the Library Education Division approved the following statement in response to an inquiry from a junior college:

> The consensus of Board opinion is that the establishment of courses for the training of library clerks or assistants in junior college should not be encouraged. While there is a need for library technicians and even though some courses are being given, there appears to be no evidence that they have been successful. It was noted that the Personnel Committee of the New York Library Association has recently recommended against a proposal for the establishment of undergraduate training programs. There are no standards for such courses.
>
> The negative reactions of Board members are based primarily on the following:
> (1) The demands on subject and language knowledge are such that for most positions a college education is essential. (2) Junior college training courses could not be credited toward other undergraduate or graduate training. The result would be that competent persons who become interested in the profession after successful experience at the technical level would find it difficult to continue toward professional degrees. ALA recommendations for undergraduate work are for courses leading to graduate courses and fully articulated with them. (See 1959 ALA Standards for Undergraduate Library Science Programs. ALA Bulletin 52: 695-700 [1958].) (3) Library clerks or aides who carry on the most routine tasks are best trained on the job or through a short-term course. (4) Many library routines vary so much from library-to-library that general courses would have limited usefulness. Employees at this level are students who, if they continue to work in libraries, will eventually obtain graduate degrees in librarianship.

The Employers

This survey is primarily concerned with training programs for library technicians and not problems of library administration. For this reason only selected examples will be given of the way library administrators have defined the jobs that technicians might fill. One of the most comprehensive job descriptions for a position a library technician might fill was encountered during a visit to the Personnel Office of the New York Public Library. That job description, along with a salary schedule, is reproduced below.

LIBRARY TECHNICAL ASSISTANT I

Nature of Work

The work of this class involves the performance under supervision of complex clerical work in the processing, recording, and shelving of library materials where an understanding of the meaning and purpose of the forms and processes characteristic of library work is required. These staff members must be able to make a practical application of their knowledge of library processing forms and techniques in order to correlate their operations with those in closely related fields. Their work is distinguished from that of Library Clerical Assistants not only because they perform tasks of greater complexity, but also because many of the operations in which they are engaged are peculiar to a library and because they must apply standards of judgment in their work which are closely related to the purposes and work processes of library science.

Staff members of this class maintain the more difficult process records where a functional acquaintance

with standard bibliographical forms is required or where the complexity of the work flow necessitates the use of several related files in order to maintain any one of them or to process a single transaction. An example of such work is recording the receipt of serials where the employee must: determine whether there is an existing entry in the official or process catalogue; decide on how the recording is to be done; have the material acknowledged; refer it for consideration to supervisors or division heads and according to instructions received either solicit it as a gift, order it or have it filed as a sample; and record all transactions throughout the process. Similar complexity is found in adding new serial and periodical material to existing catalogue cards for series which have been irregularly published, or where frequent changes of title involve making additional notes and cross references. Equally complex is the filing without revision of cards in official and public catalogues, and the transferring of more difficult serial sets of New York Public Library and Library of Congress printed catalogue cards, where one not only works from the instructions on the printer's slip but also checks against the latest record in process catalogues in order to complete series notes to date and have all records agree.

Related to the work of record maintenance, but involving in addition a significant supervisory function over several clerical assistants engaged in routine clerical and page duties, is the work performed by stack chiefs. These employees exercise direct supervision over the delivery and reshelving of materials in a large area (usually one level of the stacks) with responsibility for the continuous and efficient running of call slips in their sections. They check each day to see that books are returned and shelved correctly; count call slips and make statistical returns of materials used; search for missing books and maintain records of lost items; search catalogues and shelf lists for books reported lost; inspect shelves to discover worn books and materials to be packaged in manila rope, or to have markings renewed with white ink; and they send items in need of repair or rebinding to the bindery preparation section.

Employees of this class may also provide such public information service as part-time floor and desk attendant work, where the emphasis is on providing information about the rules and regulations of the Library or its divisions, or in dispensing information found in a few designated reference sources, or in directing readers to shelf locations and ready reference books on open shelves. Requests for reader advisory and reference information is regularly referred to supervisors or reference librarians.

Elementary technical functions engaged in by these staff members under direct guidance and supervision may include: checking for official author entries in the Library of Congress depository catalogue while engaged in the preparation of index cards; investigating in the official catalogues several titles catalogued under the same name to determine if they are by more than one author; and collating and cataloguing newspapers where the prime purpose is to record accurately the titles, dates of publication and issues available in the Library. These staff members perform related work as required.

Requirements of Work

Considerable experience performing responsible clerical work in a library or similar institution and completion of two years of college and preferably college graduation; or, an equivalent combination of experience and training which materially contributes to the development of the following knowledges, abilities and skills:

Thorough working knowledge of correct punctuation, spelling, abbreviations, grammatical usage, together with a good vocabulary.

Familiarity with and preferably a reading knowledge of two or more foreign languages and ability to exercise resourcefulness in locating and identifying library materials in several different but related languages.

Familiarity with the organization and general operating procedures of the library.

Knowledge of the commonly used working forms, cataloguing tools, and processing techniques of library work.

Ability to plan, organize and supervise the work of a number of clerical subordinates.

Ability to establish and maintain satisfactory working relationships with other employees and the public.

Superior clerical aptitude.

THE NEW YORK PUBLIC LIBRARY
Fifth Avenue & 42nd Street

A representative list of classifications and salary ranges in the professional, pre-professional, clerical and technical occupational groups

CIRCULATION DEPARTMENT
Community libraries and specialized reference units; branch system administrative and technical services

REFERENCE DEPARTMENT
Central research divisions and the related technical services

PROFESSIONAL

Librarian	#$6290 - 7490	Increment $240	Librarian I	#$6290 - 7490	Increment $240
Senior Librarian	7100 - 8900	Increment $300	Librarian II	7100 - 8900	Increment $300
Supervising Librarian	8200 - 10300	Increment $350	Librarian III	8200 - 10300	Increment $350
Principal Librarian	9400 - 11500	Increment $350	Librarian IV	9400 - 11500	Increment $350
Coordinating Librarian	10750 - 13150	Increment $400	Librarian V	11200 - 13600	Increment $400
Assistant Chief Librarian	12100 - 14500	Increment $400	Librarian VI	12100 - 14500	Increment $400

PRE-PROFESSIONAL

Librarian Trainee $5450 - $5750 - $6050

An applicant will be considered for assignment as a Librarian Trainee when he has been accepted for admission as a matriculated student at a graduate library school. When he commences classes he is eligible for $5450. Based on satisfactory service and progress toward the graduate degree, he is advanced to $5750 when he has earned 8 credits at library school, and to $6050 when he has earned 18 credits.

CLERICAL, TECHNICAL AND ADMINISTRATIVE

Clerk	$3750 - 4830	Increment $180	Clerk Typist	$3750 - 4830	Increment $180
Senior Clerk	4550 - 5990	Increment $240	Library Technical Asst. I	4250 - 5330	Increment $180
Supervising Clerk	5750 - 7190	Increment $240	Library Technical Asst. II	4850 - 6290	Increment $240
Administrative Assistant	6750 - 8550	Increment $300	Library Technical Asst. III	6750 - 8550	Increment $300

Five increments, in the amounts noted above, are granted on the basis of satisfactory service. The maximum salary rate is reached after three years of satisfactory service at the 5th increment step.

#$6290 is first increment step and so there is one less increment in the salary range.

Effective 7/1/65

Equally precise job descriptions exist for the positions of Library Technical Assistants II and III. The phrase ". . . completion of two years of college" in the Requirements of Work would indicate that the library technician with an Associate of Arts degree would be eligible for the Technical Assistant I position. The salary scale clearly differentiates this position from the Clerk Typist. The salary chart could be compared with a military organization chart in broad terms. At the top is the officer class. At the bottom are the various noncommissioned grades. In between are the equivalent of cadets or midshipmen. Carrying this analogy further, it should be noted that the top of the "non-commissioned grades" (Library Technical Assistant III) is valued more than the beginning professional (Librarian I) in terms of salary. This is in accord with the military concept that an experienced Warrant Officer or Chief Petty Officer is more difficult to replace than a young Ensign.

The Library Assistant classification in the Los Angeles County Public Library is comparable in many ways to the Library Technical Assistant in the New York Public Library. Some of the duties of such an employee were described in Chapter III in the section on California community college programs. In a letter to the author Mr. James R. Robb, Personnel Officer of the Los Angeles County Library, summarized the general types of assignments of Library Assistants as follows:

1. The non-professional assistant to the regional staff in a regional headquarters.
2. The non-professional assistant to the professional staff in a regional headquarters library.
3. The non-professional in charge of a branch circulating less than 75,000 books per year.
4. The non-professional assistant to a subject specialist in Book Selection.
5. The non-professional assistant to Cataloging staff, as part of a pool.
6. The supervisor of a clerical pool engaged in library functions such as Acquisition or coding for the book catalog.
7. The non-professional assistant to librarians in a branch circulating more than 75,000 books per year.

Despite difference in assignments, the positions (which are all under Civil Service) have the same minimum requirments. These requirements are: Completion of two years in an accredited college and six months' experience in an organized library or completion of six units of Library Science in an accredited college. We will accept as substitution, one additional year of library experience for each year of college.

The Library Assistant is the first level in our system in which permanent status can be achieved. The class is considered strong in this department, primarily because so many of our smaller branches are under the supervision of Library Assistants instead of professional Librarians.

Promotion from Library Assistant to the professional level is possible via the Library Trainee program which includes persons who have graduated from an accredited college and are currently enrolled in an accredited college offering a full library science curriculum leading to the degree of Master of Library Science.

With a number of community colleges in the Los Angeles area offering library technical training, the Los Angeles County Library probably fills more of its Assistant positions with two-year graduates than does the New York Public Library. An example of an even closer articulation of community college training with public library employment is offered by the experience of Diablo Valley College and the Contra Costa County Library in Northern California. This relationship could be achieved only by effecting several kinds of institutional changes. The successful results of those changes are the reasons for examining this example in some detail.

Contra Costa County lies in the eastern part of the San Francisco Bay Area. Its library system serves a population of more than 400,000. In the late 1950's the county, like much of California, was experiencing a population "boom" that put many municipal services under considerable stress. Mrs. Bertha Hellum, County Librarian, found it virtually impossible to recruit professional librarians fast enough to keep up with the growing demand for library service in the County. Faced with the necessity of giving added responsibilities to nonprofessionals, she asked Mr. Thomas Murray, Librarian at Diablo Valley College in Concord, California, to explore ways in which nonprofessionals could be upgraded to meet their new responsibilities. Diablo Valley College is a public junior college similar to those described in Chapters III and IV.

An arrangement was made whereby the college would offer three two-unit library courses during the regular day-time program. Mrs. Hellum guaranteed to maintain enrollment above the minimum levels required by the college by releasing County Library employees. Regular students of the college also could enroll in the courses. County Library employees in the classes had a normal work week of 38 hours but were paid on the basis of 39. The first course was offered in the spring of 1958 to a class of 56 students. (Of those 56 students 39 are members of the library staff in 1965.) Thereafter enrollments were generally in the 25 to 30 range.

The course descriptions as they appeared in the college catalog were as follows:

120 - Introduction to Library Science - 2 units. Public library methods, procedures, and organization as they concern the person who is employed as a library assistant. For the person who is currently employed in public libraries as well as the person who is planning on library employment.
121 - Use of Reference Material - 1 unit. Designed to increase the competency of library assistants in interpreting materials held in public library reference collections.
122 - Children's Literature and Library Work with Children - 1 unit. An introduction to the philosophy and techniques of work with children in public libraries, and an introduction to literature for children.

At the same time the training program was being worked out with Diablo Valley College, Mrs. Hellum began work with the County Civil Service Commission to bring job descriptions and salaries into better alignment with the level of responsibilities her staff members were assuming. The older division of clerical and professional employees was replaced by a three-level structure. This is illustrated in the current salary scale of the Contra Costa County Library System, which is reproduced below.

MONTHLY SALARIES

	½ yr	1½ yr	2½ yr	3½ yr	4½ yr
Clerical Series					
Typist Clerk	341	358	376	395	415
Intermediate Clerk & Intermediate Typist Clerk	385	405	425	447	469
Clerk III	436	458	481	505	530
Supervising Clerk I	493	517	543	570	598
Duplicating Services Clerk	341	358	376	395	415
Duplicating Machine Operator	385	405	425	447	469
Library Series - nonprofessional					
Library Clerk	325	341	358	376	395
Bookmender	367	385	405	425	447
Library Assistant Grade I	376	395	415	436	458
Driver Clerk	425	447	469	493	517
Library Assistant Grade II	436	458	481	505	530
Professional Library Series					
Librarian I (Junior Librarian)	505	530	556	584	613
Librarian II (Senior Librarian)	570	598	628	660	693
Librarian III	628	660	693	727	763
Head of Catalog Section					
Head of Reference Section					
Regional Librarian					
Librarian of Young Adult Services					
Supervising Librarian	693	727	763	801	841
Supervising Librarian of Adult Services					
Supervising Librarian of Children's Services					
Supervising Librarian of Technical Services					

In the Contra Costa Library structure the "Library Series - nonprofessional" is clearly differentiated from both the "Clerical Series" and the "Professional Library Series." It was into this middle area that most of the employees who had taken training at Diablo Valley College were able to move. At the present time the entrance requirements for Library Assistant Grade I include completion of two years of college. Entrance into the Library Assistant Grade II level requires a college degree. Substitution of experience for training is allowed so it is possible to enter as a Library Assistant I with a junior college degree and move up to Library Assistant II after two or more years of experience. After four and one-half years such a person would receive a monthly salary of $530 as indicated in the lower right corner of the "Library Series - nonprofessional" section. Here too, it might be noted, the experienced nonprofessional earns more than the beginning professional. A number of staff members who took the Diablo Valley College courses were interviewed. They had all become Library Assistants Grade II.

The job descriptions for the three principal positions in the "Library Series - nonprofessional" are reproduced below.

LIBRARY CLERK

Definition:
Under supervision to do simple clerical and manual work in a library; and to do other related work as required.

Typical Tasks:
Sorting and shelving books according to an established system; searching shelves for overdue or lost books; doing simple filing of book and catalog cards; charges and discharges books either at the lending desk at a branch, or into and out of the central collection at headquarters; sending overdue notices to borrowers; dusting and straightening books and special collections; preparing books for the bindery and checking them into the system from the bindery; cutting pages in new books and doing other simple tasks in preparing them for use; pasting book pockets into books; making and placing labels on the book jacket or cover, placing the book jackets in plastic covers and placing the processed jackets on the books; typing book cards and borrowers cards; stamping incoming books.

Minimum Qualifications:
Education: Completion of the twelfth grade.
Typing: Ability to type at a speed of not less than twenty-five words per minute from clear manuscript or from printed or typewritten copy.
Ability to follow written and oral directions; aptitude for clerical work; ability to deal effectively with the public.

LIBRARY ASSISTANT GRADE I

Definition:
Under general supervision to assist in the work of a County Branch Library; to assist readers in selecting and locating reading materials, to keep records of books loaned by the library; and to do related work as required.

Distinguishing Characteristics:
Positions in this class perform duties required to provide library service to the public at a County branch library. Employees frequently work alone during assigned hours but much of the work follows an established routine prescribed by written instructions and library policy. Questions and decisions are normally such that they can be deferred to the Library Assistant Grade II in charge of the Branch Library. Supervision of other personnel is not normally required, but incumbents may occasionally work on an assigned shift with library aides in which case some work supervision is required.

Typical Tasks:
Receives Library patrons and assists in locating requested titles, charges books out; makes renewals; discharges return books; sends out over-due notices; collects money from library fines; issues library cards; searches shelves for lost or overdue books; advises readers on use of card catalog and reference materials available in the branch library; helps children select books; arranges catalog cards; unpacks books and prepares books for shipment; opens and closes library according to established schedule.

Minimum Qualifications:
Education: Completion of two years of training in a recognized college or university.
Typing: Ability to type at a speed of not less than twenty-five words per minute from clear manuscript or from printed or typewritten copy.
Experience: One year of experience in library work or in a position involving meeting the public and including clerical responsibilities.
Alternate Pattern of Education and Experience: Additional qualifying experience may be substituted for the required education on a year-for-year basis up to a maximum of two years.

General knowledge of common library facilities, reference materials and procedures; familiarity with a variety of literary materials and literature; ability to keep simple records; ability to understand and follow written and oral directions; ability to do simple clerical work; ability to deal effectively with the public; interest and aptitude for library work.

LIBRARY ASSISTANT GRADE II

Definition:

Under general supervision to be in charge of a County Branch Library, or to perform responsible sub-professional library technical work in a specialized library service; and to do related work as required.

Distinguishing Characteristics:

Positions in this class if assigned to a Branch Library, perform many of the same tasks as do positions in the class of Library Assistant Grade I; however, positions in the class of Library Assistant Grade II are designated as the one responsible for overseeing the operations of a particular branch and making such decisions as arise in the routine of operations. Positions when assigned to the headquarters of the library perform assigned tasks in a specialized library section such as, reference, book assignment, or cataloging under the guidance of a professional librarian.

Typical Tasks:

Confers with the County Librarian and other professional staff members regarding library policies, book selection, and library program planning; recommends the hours the library might best be open to the public; schedules hours of branch personnel and arranges for substitutes; represents the County Librarian in library program in meetings with local officials and civic groups; instructs, trains and reviews work of assigned branch personnel; arranges book layout in branch library; plans library exhibits; sees that library building is clean and orderly and arranges for required maintenance; charges and discharges books; files and revises filing of cards in card catalog; checks bibliographies and other sources for requested information; keeps required records; prepares publicity materials for the branch library; submits regular and periodic reports to the County Librarian.

Minimum Qualifications:

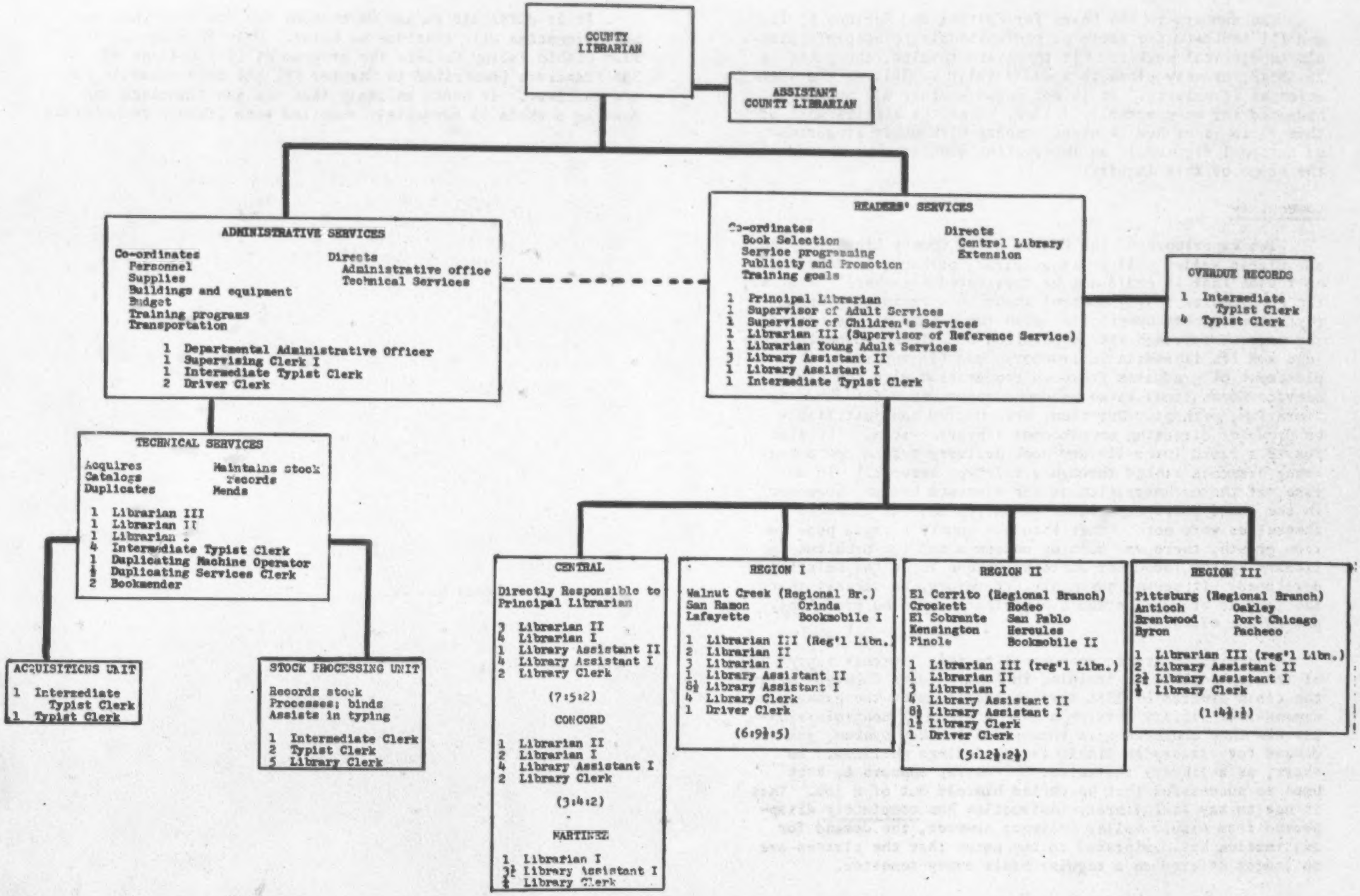
Education and Experience: Either (1) Graduation from a college or university of recognized standing and present enrollment as a graduate student in an accredited school of librarianship or (2) Graduation from a college or university of recognized standing and one year of responsible sub-professional experience in a library, or in related work involving contact with books and literature and meeting the public.

Substitution: Additional qualifying experience may be substituted for the required education on a year-for-year basis up to a maximum of four years.

General knowledge of common library facilities, reference materials and procedures; familiarity with a variety of literary materials and literature; familiarity with basic reference tools; familiarity with library methods, procedures and organization; ability to keep simple records; ability to understand and follow written and oral directions; ability to do simple clerical work; ability to deal effectively with the public; interest and aptitude for library work; ability to supervise other personnel; ability to appear before community groups.

In its simplest terms the "Library Series - nonprofessional" might be summarized as follows: library clerks first gain employment with only a high school education; library assistants I are first employed after junior college training. library assistants II are employed immediately after taking their B.A. degree. This intermediate series has the advantage of offering satisfying and challenging work to a group of employees who are clearly capable of assuming more than clerical responsibilities but do not possess professional qualifications. In such an administrative structure challenging work can be offered to such individuals without any misconceptions arising in their minds, among their supervisors, or within the civil service commission as to who and what a professional librarian is.

The frequency distribution of employees in various categories throughout the County System as it existed in March 1963 is indicated on the following organizational chart.


COUNTY LIBRARIAN
ASSISTANT COUNTY LIBRARIAN
ADMINISTRATIVE SERVICES
Co-ordinates
Personnel
Supplies
Buildings and equipment
Budget
Training programs
Transportation
Directs
Administrative office
Technical Services
1 Departmental Administrative Officer
1 Supervising Clerk I
1 Intermediate Typist Clerk
2 Driver Clerk
READERS' SERVICES
Co-ordinates
Book Selection
Service programming
Publicity and Promotion
Training goals
Directs
Central Library
Extension
1 Principal Librarian
1 Supervisor of Adult Services
1 Supervisor of Children's Services
1 Librarian III (Supervisor of Reference Service)
1 Librarian Young Adult Services
3 Library Assistant II
1 Library Assistant I
1 Intermediate Typist Clerk
OVERDUE RECORDS
1 Intermediate Typist Clerk
4 Typist Clerk
TECHNICAL SERVICES
Acquires
Catalogs
Duplicates
Maintains stock records
Mends
1 Librarian III
1 Librarian II
1 Librarian I
4 Intermediate Typist Clerk
1 Duplicating Machine Operator
½ Duplicating Services Clerk
2 Bookmender
ACQUISITIONS UNIT
1 Intermediate Typist Clerk
1 Typist Clerk
STOCK PROCESSING UNIT
Records stock
Processes; binds
Assists in typing
1 Intermediate Clerk
2 Typist Clerk
5 Library Clerk
CENTRAL
Directly Responsible to Principal Librarian
3 Librarian II
4 Librarian I
1 Library Assistant II
4 Library Assistant I
2 Library Clerk
(7:5:2)
CONCORD
1 Librarian II
2 Librarian I
4 Library Assistant I
2 Library Clerk
(3:4:2)
MARTINEZ
1 Librarian I
3½ Library Assistant I
½ Library Clerk
REGION I
Walnut Creek (Regional Br.)
San Ramon
Lafayette
Orinda
Bookmobile I
1 Librarian III (Reg'l Libn.)
2 Librarian II
3 Librarian I
1 Library Assistant II
6½ Library Assistant I
4 Library Clerk
1 Driver Clerk
(6:9½:5)
REGION II
El Cerrito (Regional Branch)
Crockett
El Sobrante
Kensington
Pinole
Rodeo
San Pablo
Hercules
Bookmobile II
1 Librarian III (reg'l Libn.)
1 Librarian II
3 Librarian I
4 Library Assistant II
8½ Library Assistant I
1½ Library Clerk
1 Driver Clerk
(5:12½:2½)
REGION III
Pittsburg (Regional Branch)
Antioch
Brentwood
Byron
Oakley
Port Chicago
Pacheco
1 Librarian III (reg'l Libn.)
2 Library Assistant II
2½ Library Assistant I
½ Library Clerk
(1:4½:½)

The numbers in the boxes for Central and Regions I, II, and III indicate the ratio of professionals to nonprofessionals to clerical workers. If these are totaled, the ratio is 23:39:12, or very close to a 2:3:1 ratio . This is the situation as it existed. It is not known whether all positions budgeted for were actually filled. What the significance of this ratio is or how it might compare with other libraries or national figures is an interesting question but beyond the scope of this inquiry.

Commentary

The experience of the Contra Costa County Library System and Diablo Valley College is atypical, perhaps, but there is no reason that it could not be duplicated elsewhere. That is, the opportunity to (1) control input to a training program (by releasing employees), (2) plan the nature of the upgrading process (through the cooperation of a local community college and its librarian instructor), and (3) supervise the placement of graduates (through cooperation with the Civil Service Commission) is an uncommon opportunity for a county librarian, perhaps. But then, Mrs. Hellum can justifiably be proud of directing an uncommon library system. (It also boasts a rapid inter-library book delivery system operating among branches linked through a teletype network.) In any case, if the orchestration of the elements brought together in the Conta Costa experience was atypical, the elements themselves were not. Other than the county's rapid population growth, there was nothing unique about the problems the library system faced nor anything unique about the solutions developed. It seems reasonable, therefore, to suggest that the lessons of Mrs. Hellum's experience could be profitably put to use elsewhere.

There is an ironic denouement to this "success story" of library technician training in Contra Costa County. After the crash program of 1958 through 1962 to meet the growing demands for library service, a stable group of nonprofessionals was then employed in a successful library system; and the demand for classes at Diablo Valley College declined. In short, as a library instructor Mr. Murray appears to have been so successful that he worked himself out of a job. This is not to say that library instruction has completely disappeared from Diablo Valley College; however, the demand for instruction has diminished to the point that the classes are no longer offered on a regular basis every semester.

It is difficult to say whether or for how long the present situation will continue to exist. Only 30 miles or so from Diablo Valley College the program at City College of San Francisco (described in Chapter IV) has only recently gotten underway. It seems unlikely that the San Francisco Bay Area as a whole is adequately supplied with library technicians.

CHAPTER VII

LIBRARY TECHNICIANS AND THE FUTURE

"The technician can pick up the slack in an information or library facility and at the same time further his own intellectual and personal goals. A boon to industry and government is the rapid development of community colleges and technical institutes to train these scarce technicians.. . . A two-year community college program for information technicians could offer the basic sciences and humanities with stress on clerical skills and some specific information techniques (e.g., photo-reproduction, computer principles and repair, punchcard operation, library circulation, and other routines)."

[Cohan and Craven, Science Information Personnel, published by the Modern Language Association (1961).]

Even though several of the programs previously described were in existence when Cohan and Craven wrote their report, their use of the subjunctive "could" was largely justified. If the quotation above were written today, however, the evidence in this report would support the use of the indicative mood in place of the subjunctive. Purists might argue that the "library technicians" described here do not actually constitute "information technicians" as the term is used above. But if existing programs are traditionally oriented, it is most likely a simple reflection of market demand. When documentation or information centers give evidence of manpower problems as school and public libraries have done, junior college curricula for information as well as library technicians will undoubtedly come into existence.

Discussion of the validity of the distinctions that are currently drawn (by some) between Information Science and Library Science is not appropriate here. However, a consideration of preceding chapters that tries to point out implications of future significance cannot ignore current debates about the "information explosion." Discussion about the exponential growth rate of scientific and other literature has become widespread. There is some question about the use of the term "explosion" to describe this growth in view of the normal increase that would be expected to accompany rising literacy rates in a growing population. But this debate need not concern us either. However rapidly our libraries are being filled,* and whatever the disagreements over terms to describe this phenomenon, there is general consensus that management of the world's literature will call for greater efforts than have ever been imagined, much less exerted, in the past.

Since a great expenditure of effort necessarily would involve a great expenditure of money, the question must be asked: "Is it worth it?"** What if all the books and all the position papers were simply piled cover to cover - unmanaged and unretrieved. How serious or costly would be the resultant loss? Stated otherwise, how much can we afford to spend managing the world's literature storehouses before the administrative costs exceed the value of the services they provide? Although evaluative techniques are being developed to answer such questions for limited collections, there is no known method for arriving at reliable answers when the question is posed for society as a whole.

We may arrive at a point of diminishing returns in such an investment program; or perception of what appear to be diminishing returns may become widespread; but that seems un-

*In Science (Vol. 141, Sept. 13, 1963) John Senders described three methods for estimating the growth of the world's literature. The methods produce markedly similar results, and he concluded that the world's literature is doubling about every 22 years.

**That this is not a facetious question is indicated by the writings of Marshall McLuhan (The Gutenberg Galaxy and Understanding Media) and their critical reception. In a brilliant and disturbing manner McLuhan challenges us to reconsider five centuries of historical development, the role of printing and "typographic man" in that development, and the significance of electronic communication media for the civilization produced during those five centuries. A possible relationship between McLuhan's thought and the subject of this study is suggested by the emphasis on audio-visual instruction in many library technician programs (e.g., the Communications Media course at Los Angeles Trade Technical College described in Chapter III). It could be that the library technicians of today will become the information technicians of the future, not because of instruction in computers and electronic data processing which might be introduced into the curriculum, but because of the training they receive now in audio-visual media. Likewise, the chief distinction between the library subprofessional and the professional may turn out to be the greater familiarity of the former with the use of radio, television, and film rather than the greater bibliographic sophistication of the latter.

likely in the near future in view of continued Congressional support for the Library Services Act plus recent legislation providing support for elementary and secondary school libraries, college and university libraries, medical libraries, and technical information centers operated by individual states. Thus, it seems safe to assume that we will continue to spend increasing amounts on the management of all kinds of literature.

When reviewing two dozen case histories of efforts to train library technicians in this context, it becomes necessary to ask: Does library technician training represent a straight-forward extrapolation of earlier developments; i.e., are we simply spending more money for more people to practice the same routines, but on a grander scale? Or, are the emergence and proliferation of library technician training programs indicative of something new? Most important, is it an innovation likely to bring about real gains in productivity?

Greater numbers of library technicians certainly are doing at present much that Melvil Dewey and his colleagues had in mind a half-century ago, but at a subprofessional level. But, in addition, this revolution in scale does mean that an entirely new concept of library service is emerging; and this, just as certainly, is a change from the earlier concept of the librarian as "guardian of the books."* So something new has been added, even though the new product is poured out of a vessel that appears to have been struck from an old mold. That is, the courses and curricula often look like adaptations of the teacher's graduate instruction rather than truly novel systems for producing subprofessionals.

The breakdown of a complex operation into a series of simple tasks is a characteristic that is increasingly found in modern technology; and though the shift of certain operations from a single professional to a team of subprofessionals is a comparatively new phenomenon in the library field, it is increasingly found in other professions - in industry, in the military, and throughout the service sector of the economy. In short, library technicians can be viewed as participants in a widespread technician movement, which is probably one stage in the natural development of a highly industrialized and affluent society. At the same time, their increasing presence is likely to influence the whole library environment in ways that justify using the word "innovative"; to describe their training.

As programs for training library technicians continue to grow in number and enrollment, assessing their significance involves predicting the nature of the libraries of the future and the possible role of the technician in them. There are as many blueprints for the "library of the future" as there are information scientists, documentalists, librarians, systems designers and others making projections of future information needs. Though a variety of training programs could be imagined for different kinds of future libraries using various configurations of "hardware" and human resources, I would suggest that libraries are likely to evolve into institutions something like the retail establishments of today.*

In some ways an airline ticket counter might be a more apt choice for a model drawn from the contempory scene since ticket agents have a concern for customer service comparable to that of a good store clerk (or a good reference librarian), and ticket agents increasingly use the facilities of electronic data storage devices. That is, an airline ticket agent provides necessary human services at the interface between the customer and the company's computer memory. The department store-library analogy is chosen, however, because both are essentially distributive organizations. Neither does any heavy processing of the goods it distributes; neither does any significant manufacturing. In one case payment is made on an item-by-item basis or in a monthly charge (using a card that resembles a library card), while the library usually bills its users annually when it collects a percentage of their taxes.

The important differences between these two distributive institutions, however, show up most clearly when inventories and payrolls are compared. It is at this point that the relationship of the analogy to library technicians becomes apparent. The Reference Department of the New York Public Li-

*Reference service as an accepted feature of library activity is a comparatively recent development for an institution which commonly dates itself from ancient Alexandria. Just how recent (and how peculiarly American) is pointed out by Samuel Rothstein in his monograph on the development of reference services, ACRL Monograph No. 14, American Library Association, Chicago, Illinois (1955).

*Elsewhere I have outlined some reservations about the usefulness of computers in a library environment (see "Development Information: Do We Need Computers?" in International Development Review, Vol. VI, No. 2, June 1964, p. 35). A perceptive statement on this issue by Dr. Estelle Brodman, former President of the Medical Library Association, appeared in Medical Education, Vol. 40, No. 1 (part 1) Jan. 1965, p. 50-51. In a remarkably clear and succinct manner she has delineated the problems in a subject area clouded by claims, counter-claims, self-deception, and lack of reliable information.

brary spends 54 percent of its annual budget of over $6,000,000 on salaries.* Since the library is open 365 days a year, this means its administrators must meet an average daily payroll of about $9,000. (It actually exceeds this slightly since retirement and other fringe benefits are not included in the figure for direct salary costs.) The employees of this department include about 380 clerk-typists, library technical assistants and professional librarians plus administrative, custodial, and other employees shared with other library departments.

These employees have an inventory of approximately 4,500,000 books entrusted to them. For the sake of this argument we will not consider the several million pamphlets, maps, historical documents, films and other items which are also part of the collection. These should be included in any accounting of the replacement value of the inventory. If we assume that the book collection could be replaced at an average cost of $10.00 per item, the total inventory would be valued at $45,000,000. This is a very conservative estimate since a new book purchased for $5.00 commonly costs a library $10.00 by the time it has been ordered, processed and shelved. Since replacement of the New York Library's reference collection would require photocopying many out-of-print items, the real average cost would exceed $10.00. (In this analogy we must ignore the literally "priceless" items which could never be replaced.) The point of these calculations is merely to emphasize that an institution in midtown Manhattan spends $9,000 on salaries every day and entrusts to its employees an inventory whose replacement cost would exceed $45,000,000 by a considerable amount. In short, the daily payroll to daily inventory ratio in the Reference Department of the New York Public Library does not exceed 1/5,000.

Less than 10 blocks from the library is another distributive organization serving essentially the same market area --Macy's Department Store. Comparable data on payroll and inventory for Macy's are not so readily available so the analogy cannot be pursued in full detail. Nevertheless, the accuracy of some rough estimates will not greatly alter the main point of the argument. First, it seems not unreasonable to believe that one of the world's largest department stores would have a daily payroll much closer to $90,000 than $9,000.

*This information comes from The Many Faces of the Library, a publication of the New York Public Library, and from conversations at the Library's personnel department. The Reference Department does not receive its support from public funds as the rest of the Library does but depends largely on gifts and endowment income. Perhaps this makes the analogy with a private business even more realistic.

Second, it is difficult to believe that even Macy's would have an inventory of as much as $4,500,000 (at replacement cost) on hand on any given day. If my guess as to payroll is not unreasonable, and if the inventory estimate is generous, then the payroll to inventory ratio for Macy's on any given day cannot be smaller than 1/50. In other words, the proportion of Macy's inventory value represented by the payroll costs expended in tending that inventory is at least 100 times greater than the comparable proportion in the New York Public Library (1/50 as contrasted with 1/5,000).

Although manpower resources in one of the world's largest retail establishments cannot easily be compared with manpower in one of the world's largest libraries, these computations do suggest the difference in society's demands for service in two types of distributive organizations. A queuing time of as much as five minutes while waiting for service is probably enough to send all but the most determined Macy's customer on his way to Gimbel's. At the New York Public Library (or almost any other) few of us would think it extraordinary to spend anything from half an hour to half a day completing a literature search of only ordinary complexity.

This difference in what we expect (and usually receive) in the two types of distributive organizations can be only partially explained by the fact that the library's inventory is made up of more discrete items. If Macy's had to stock parts for all the models of electric toasters it sold in 1926 (or platens for the Remington Typewriter of 1898), its inventory would consist of many more discrete items than is the case. In essence, this is the kind of inventory a library is expected to maintain. But keeping track of the inventory is not a library's chief problem in giving service to users. Very simply, libraries don't have platoons of clerks standing by every book stack eagerly waiting for customers. In this analysis I am in no way implying that librarians should be blamed for the present state of affairs. On the contrary, the library profession makes a concerted effort to imbue its neophytes with the notion of librarianship as a service occupation. If librarians have a public image which appears to emphasize guardianship of the books rather than service to people, the public bears responsibility for failure to provide the resources which would enable librarians to give more extensive services. Unfortunately, attitudes on the part of the public and the profession tend to reinforce each other in a vicious circle that is unlikely to be broken by recriminations on either side.

To summarize and simplify the argument presented so far: When policy-makers do budgetary projections for libraries, they usually act as if they were involved in a warehousing operation rather than a retailing operation. There are many

reasons for this, requiring more historical knowledge than this survey can encompass. The critical issue for library technician training programs, however, is the future. Imagine what library policy might be if it were determined by Macys' or Gimbels' Board of Directors. Libraries would probably operate more in the style of department stores (and airline ticket counters) than as warehouses. Will society in the future demand that its information needs be attended to with as much care as the need for goods has been in the past? If such a development occurs, and persuasive arguments to this effect can be offered, then there is likely to be a growing demand for all kinds of information-handling personnel--not only for library technicians.

Even if we grant that the suggested developments will actually occur, the problem for a community college administrator contemplating a library technician program remains, very simply: How soon will the future get here? If he begins the program too early, the value of his graduates may go unrecognized by a society that actually needs their skills. Such graduates will not make good advertisements for the program. If the administrator waits too long, he may find himself in a crash program later, having already expended finite resources on other programs designed in response to less pressing needs.

What does the picture in the crystal ball look like? This is still the $64 or $64,000 question, and the answer depends largely on where the viewer happens to be standing. The majority of the two dozen programs described in this report started without any substantive knowledge of other programs. They were designed to meet needs in local areas.

College administrators manage investments in human resources. Like investment managers in the conventional sense they must analyze complex situations, make decisions, and be willing to back their judgment with a committment of tangible assets. Hopefully, informed judgments about the future of library technician training will be possible as better information becomes available. The future of library technician training may be bright, but unresolved questions make it uncertain. Research to produce information to resolve uncertainty is needed.

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